

PRELIMINARY OUTCOMES AND FEASIBILITY OF A SOCIAL-EMOTIONAL
LEARNING INTERVENTION FOR HISPANIC/LATINO UNDERGRADUATES

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ABSTRACT

Erica Fornaris: Preliminary Outcomes and Feasibility of a Social-Emotional Learning Intervention for Hispanic/Latino Undergraduates
(Under the direction of Steve Knotek)

This investigation examined preliminary outcomes and feasibility of a SEL intervention for Hispanic/Latino undergraduate students. To determine feasibility and usability, the investigator gathered feedback from stakeholders about intervention implementation, such as satisfaction with intervention content and delivery. The researcher also hypothesized that after participating in the intervention, Hispanic/Latino students would demonstrate greater gains in sense of belonging, self-management, and growth mindset than control group peers. Intervention research protocol and a mixed methods design guided the study.

51 undergraduate Hispanic/Latino students participated, 23 in the treatment condition and 28 in the control condition. Treatment condition participants attended four small-group program sessions, whereas control condition participants did not receive intervention. Sense of belonging, growth mindset, and self-management were measured at pretest and posttest with a Likert scale survey. Feasibility and acceptability were measured with a program feedback survey provided to the treatment condition. Six participants also completed interviews to share their experience with college and the SEL intervention. Participant interviews and responses on open-ended feedback survey items were analyzed qualitatively with inductive and deductive coding. Two-way repeated measures analysis of variance was used to investigate the effect of time and participation in the treatment or control group on sense of belonging, growth mindset, and self-management.

Results indicated that students found the SEL program relevant to their lives and its delivery mode acceptable. The following program delivery themes emerged: use of food as a motivator to attend, a desire for a program longer than four sessions, and preference for the small group format. With regard to program content, sense of belonging was most salient, followed by self-management and growth mindset. Within self-management, themes of time and stress management emerged as salient rather than the expected goal setting theme. Quantitative analysis indicated significant gains in sense of belonging for those who participated in the intervention but no significant differences were found for self-management or growth mindset. Overall integration of results supported inclusion of core constructs of sense of belonging, self-management, and growth mindset in a SEL program for Hispanic/Latino college students. Future research should investigate program efficacy with a larger sample size and modified survey instruments, as well as consider the addition of program sessions.

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LIST OF ABBREVIATIONS

CLC	Carolina Latino/A Collaborative
GPA	Grade point average
HBCU	Historically Black Colleges and Universities
HSI	Hispanic-Serving Institution
PDSA	Plan-do-study-act
PWI	Predominantly white institution
RA	Resident advisor
RCT	Randomized control trial
SBP	Summer bridge program
SEL	Social-emotional learning
SES	Socio-economic status
UNC-CH	University of North Carolina at Chapel Hill

CHAPTER I: INTRODUCTION

The Hispanic/Latino population in the United States is rapidly increasing, yet the proportion of college degrees conferred to this population remains strikingly low. In 2000, Hispanics/Latinos comprised 12.5% of U.S. population. By 2010, that number had grown to 16.3%, and it is projected to continue to grow (U.S. Census Bureau, 2000 & 2010). Based on population growth and increasing college eligibility, Hispanics/Latinos are increasingly enrolling in college. Yet they still lag other groups in number of college degrees awarded (Fry & Lopez, 2012). In the 1999-2000 academic year, 6.3% of college degrees conferred were to Hispanic/Latinos, whereas 77.5% were conferred to white students and 9% to African American students. By the 2009-2010 academic year, 8.8% of degrees conferred were to Hispanics/Latinos, 72.9% were to white students and 10.3% were to African American students (National Center for Education Statistics, 2012). This proportion remains significantly discrepant from the percentage of Hispanic/Latinos comprising the general population (Fry & Lopez, 2012).

North Carolina has a particularly rapidly growing Hispanic/Latino population. In 2000, the U.S. census indicated that 4.7% of North Carolina's population was of Hispanic/Latino origin. In 2010, the number had almost doubled, making up 8.4% of the state's population (U.S. Census Bureau, 2000 & 2010). Despite population growth, the percentage of Hispanic/Latino residents who have achieved higher education in the state is lagging well behind that of the general population. In North Carolina, 16% of Hispanic/Latino adults hold an associate degree or

higher, whereas 35% of all adults in North Carolina hold an associate degree or higher (National Center for Education Statistics, 2012). Given the ever-increasing growth in the Hispanic/Latino population in the state, this disparity must be addressed.

With the increasing Hispanic/Latino population, more colleges and universities have been designated as Hispanic-Serving Institutions (HSIs). In order to receive this designation, 25% of undergraduate full time students must self-identify as Hispanic/Latino. The number of institutions that meet the enrollment threshold has grown from 137 in 1990 to 409 in 2013. These institutions, unlike historically black colleges and universities (HBCUs), were not specifically developed to meet the needs of the Hispanic/Latino population. Thus, they vary in their programming and the extent to which they embrace these students as a group. In 2013, more than 58% of Hispanic/Latino students enrolled in college were enrolled in HSIs. Forty-seven percent of Hispanic/Latino undergraduates attend 2-year institutions (Hispanic Association of Colleges and Universities, 2015).

For purposes of this paper, the term Hispanic/Latino is used to refer to all persons who self-identify as either Hispanic or Latino. The 2010 U.S. census defines “Hispanic or Latino origin” as someone who hails from Cuban, Mexican, Puerto Rican, South or Central American, or another Spanish culture. Hispanic/Latino is not considered a race, but an ethnicity, country of origin, nationality, or lineage (Humes, Jones, & Ramirez, 2011). Thus, Hispanics/Latinos may be U.S. citizens, citizens of one of the identified countries, or simply trace their lineage to one of those cultures. Given the broad nature of the definition, there is considerable variability in use of the terms “Hispanic” and “Latino”. For example, the definition does not specify that individuals from Spain are included, but it implies that they are by the inclusion of “other Spanish culture”. While the definition implies that Brazilians are included, this group is sometimes considered

Latino but not Hispanic, given the Latin American origins of their culture but lack of affiliation with the Spanish culture and language. In the United States, there is also cultural variability in whether individuals tend to prefer to use the term “Hispanic” or “Latino”. A 2008 Pew Research center study found that 36% preferred to self-identify as Hispanic, 21% preferred the term Latino, and the remaining 43% had no preference. Many people choose to refer to their country of origin instead, using specific terms like “Mexican American” or “Cuban American” (Passel & Taylor, 2009). Based on the variability in term definition and preferred usage in the United States, the census adopts the stance that anyone who self-identifies as Hispanic or Latino is counted as such (Humes et al., 2011). This paper follows suit, using the term Hispanic/Latino to refer to any groups and persons who self-identify as either Hispanic or Latino.

Defining Success in College

Given the increasing number of Hispanic/Latino students attending college, it is important to consider factors that may contribute to their ultimate success in postsecondary schooling. Historically, benchmarks for success have been academic achievement, persistence from year to year, and college graduation. College persistence and retention are terms that are often used interchangeably, although persistence may be conceptualized as referring to the *student* who enrolls in college and remains until graduation, whereas retention may be described as the *institution's* success in retaining students from year to year (Smith, 2003). Many students enroll in college but do not persist and ultimately achieve a degree. Nationally, these college graduation rates are lower for groups like Hispanic/Latinos and African Americans. According to data from the National Center for Education Statistics on the 2008 entering cohort at all U.S. four-year institutions, 43.7% of white students, 21.4% of African American students, and 30.4% of Hispanic/Latino students graduated in four years (National Center for Education Statistics,

2015). In another study, Hispanic/Latino first generation students were found to be 34.5% less likely to persist in college than white first generation students (Lohfink & Paulsen, 2005).

Graduation and retention rates are only one piece of the puzzle, as a broader understanding of college success is imperative. The holistic view of success recognizes the importance of persistence and graduation rates, but also recognizes that whole student development is integral to college persistence, graduation, and an ultimately successful life. Such development is broadly conceptualized to include intellectual, academic, emotional, social, ethical, and spiritual growth during college (Smith, 2003). College mission statements have increasingly emphasized broad student development, in part because research has demonstrated that academic achievement is not the only indicator of persistence, graduation, and positive outcomes after college (Jamelske, 2009; Walsh & Kurpius, 2016). In fact, myriad non-academic factors such as integration into peer activities at the university, interaction with faculty, high expectations, strong performance goals, on-campus residence, and full time enrollment (versus part time) are positive predictors of college persistence. Lack of financial support, simultaneously holding a job, and first generation student status are negative predictors of persistence (Therriault & Krivoshey, 2014; Smith, 2003; Walsh & Kurpius, 2016). Furthermore, college students frequently report feeling stressed, socially isolated, depressed, and/or anxious (American College Health Association, 2013; Hartley, 2011). Such negative mental health symptoms are associated with greater student difficulties in achieving college goals and, ultimately, graduating. Thus, university efforts to increase student success have also increasingly emphasized non-academic factors (Smith, 2003). This is consistent with research suggesting that non-academic components like coping, sense of belonging, self-esteem, self-concept, self-determination, and social skills are critical to both student persistence and holistic

growth in college (Adams & Proctor, 2010; Adebayo, 2008; Smith & Zhang, 2009; Strayhorn, 2011; Walton & Cohen 2007; 2011).

Unique Challenges and Promotive Factors for Hispanic/Latino Undergraduates

The literature indicates that Hispanic/Latino college students are faced with a unique set of barriers to achieving such college success, but the literature also identifies promotive factors that aid these students. Because many Hispanic/Latino students matriculate from high schools with fewer resources and academic opportunities, these students may enter college with less exposure to rigorous academic standards and may feel academically unprepared (Gandara & Contreras, 2009). Furthermore, Hispanic/Latino students are more likely to face discrimination or stereotype threat than their white peers, which affects their self-perception as an academically capable student (Gloria & Castellanos, 2003). These negative social experiences, as well as awareness of cultural differences from the majority of students, may also contribute to uncertainty about belonging at the university (Gandara & Contreras, 2009). Furthermore, Hispanic/Latino college students are the most likely group to juggle multiple demands like holding a part time job or attending to family responsibilities. These added obligations increase the potential for overwhelming stress and the need for adaptive coping skills (Petty, 2014; Phinney, Dennis, & Osario, 2006).

Despite these risk factors, several non-cognitive factors have been identified as promotive factors for this population. These factors are similar to those for other groups that face parallel challenges in college, such as African American and first generation students. Literature indicates that Hispanic/Latino student success is supported through building sense of belonging, perceived self-efficacy and growth mindset, and self-management. Sense of belonging involves feeling supported by peers, feeling welcome in the college environment, and feeling as though

other peers have similar values (Arana et al., 2011). Also implicated is the cultural concept of “familia”, the sense that the college community is a family (Segura-Herrera, 2006). Self-efficacy and growth mindset are linked concepts that have also been found to contribute to Hispanic/Latino students’ college success (Blackwell, Trzensniewski, & Dweck, 2007; Solberg & Villareal, 1997). With regard to self-management, Hispanic/Latino college students who have high expectations and set concordant goals have been found to experience greater academic success (Lohfink & Paulsen, 2005). The ability to manage negative thoughts and emotions regarding stressful situations has also been identified as a key skill for Hispanic/Latino students to experience success (Gandara & Contreras, 2009; Nunez, 2009).

Despite awareness that these promotive skills support success for many students, most college transition programs target academic preparation, orientation to the university, and access to resources (Benders, 2009; Strayhorn, 2011). Some interventions aim to build positive campus climate and a sense of community. These programs have demonstrated promising short-term outcomes, as students reported greater sense of belonging and academic achievement increased. College mentoring programs for Hispanic/Latino students have also been shown to be effective in building sense of belonging. (Gonzalez, Brammer, & Sawilowsky, 2015; Strayhorn, 2011). Freshmen seminars and other programming offered as coursework is increasingly providing students with skill building opportunities surrounding study skills and goal setting, for example. There is still relatively little data on the impact of such programming, however. Despite these advances, no programming has specifically targeted the social and emotional aspects of “college success”, particularly those factors that are known to be promotive for the Hispanic/Latino student population.

Social-emotional learning (SEL) programs have historically targeted skills like self-management, sense of belonging, self-efficacy, and growth mindset and thus offer a promising framework for bolstering these known promotive factors. Very little SEL programming has been implemented with college students, but SEL programs have demonstrated success in improving outcomes for younger populations considered “at-risk”. For example, a large meta-analysis of SEL programs conducted at the K-12 level indicated that participation was linked to improved SEL skills as well as broad changes in attitudes, emotional health, behavior, and academic performance. (Dymnicki et al., 2013; Durlak, Weissberg, & Pachan, 2010). Several studies have also specifically investigated the efficacy of SEL programs for Hispanic/Latino high school students, demonstrating success in building resiliency and facilitating positive outcomes (Castro-Olivo, 2014). Thus, the SEL framework holds promise for promoting college student success with this group of students, as well as for other student groups who encounter similar challenges.

Statement of the Problem

While Hispanic/Latino students are increasingly enrolling in college, they face unique barriers that contribute to lower rates of college persistence and graduation. In order to support these students in achieving college success, university programming should be developed to address known barriers and promotive factors that increase the likelihood of overcoming such obstacles. Research indicates that sense of belonging, growth mindset, and self-management are the three SEL skills most linked to positive college outcomes for Hispanic/Latino students. Despite this, very few college programs aim to incorporate direct teaching of these skills. In contrast, SEL programs implemented with high school Hispanic/Latino students have been successful in building resiliency and promoting positive outcomes. A logical next step is to examine whether the SEL approach at the college level will also support student success.

Therefore, the goal of this study is to examine a recently developed SEL intervention for Hispanic/Latino college students. To ground the intervention in theory and the implementation context, an intervention research protocol will be followed. The intervention's core components of sense of belonging, growth mindset, and self-management will be piloted on a small scale and modified according to process and outcome data. Two primary research questions will be addressed. First, this study will examine the feasibility of the SEL intervention in the college setting, gathering feedback from students regarding their perceptions of the intervention setting, format, and method of delivery. Secondly, this investigation will assess preliminary outcomes of the intervention, examining whether Hispanic/Latino students who participate increase their sense of belonging, growth mindset, and self-management skills relative to Hispanic/Latino students who do not participate. In determining feasibility and preliminary outcomes of the SEL intervention, study results will inform subsequent steps in the research intervention protocol, with the short term goal of refining the program so that it may be tested on a larger scale. Ultimately, the long-term goal is wider dissemination of a program to support Hispanic/Latino college success.

CHAPTER 2: LITERATURE REVIEW

Social Emotional Learning

Theories of social and emotional learning (SEL) are based on the premise that social and emotional factors play a critical role in students' ability to achieve educational success and become a good student, citizen, and worker. This widens the lens of the educational experience from largely academically focused to a more comprehensive character and/or resiliency-building approach (Dymnicki, Sambolt, & Kidron 2013; Merrell, 2010). SEL has been defined as students' development of and effective use of the knowledge, skills, and beliefs needed for tasks like regulating emotions, setting effective goals, making healthy decisions, and cultivating positive relationships. The Collaborative for Academic, Social, and Emotional Learning (CASEL, n.d.) is the organization most involved in promoting the SEL framework and use of evidence-based SEL programming in educational settings. Increasingly, educators and researchers recognize and emphasize the influence of social and emotional factors on student resilience, positive mental health, and educational outcomes (Dymnicki, Sambolt, & Kidron 2013; Merrell, 2010).

CASEL describes five core competencies involved in the SEL framework: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. These components are thought to be interrelated yet distinct skills (Dymnicki et al., 2013). Self-awareness consists of identifying one's emotions, interests, and values. Understanding one's strengths and weaknesses to maintain a realistic self-confidence also falls

under the self-awareness umbrella. Self-management involves emotion and impulse regulation, managing stress, and setting and persevering toward goals (CASEL, n.d.). Bradley, McCraty, Atkinson, Tomasino, Daughery, and Arguelles (2010) found that emotion regulation is a particularly salient skill for high school and college students who are expected to manage competing demands that may be overwhelming and stressful. Social awareness involves empathizing with others, appreciating diversity, and identifying and using social supports. This includes identifying situations in which a problem might be better solved by accessing social support. The relationship skills area of competency is defined as forming and maintaining cooperative relationships, resisting social pressure, and resolving interpersonal conflicts. Help-seeking skills are emphasized. Mattanah, Ayers, Brand, Brooks, and Quimby (2010) found that college students who feel connected to a supportive peer network are less likely to feel lonely, more likely to feel socially supported, and more likely to persist in college. The fifth competency, responsible decision making, emphasizes the importance of making choices that take into consideration ethics, social norms, possible consequences, safety, and respect for others (Dymnicki et al., 2013).

Theories of psychological grit are often conceptualized as falling under the SEL umbrella. Duckworth, Peterson, Matthews, and Kelly (2007) defined psychological grit as a trait embodying perseverance toward and passion for long-term goals, as evidenced by sustained effort and enthusiasm for the goals. Perseverance can be defined as continued commitment and effort toward pursuing a goal. Grit is conceptualized as having two distinct components: effort and interest. Effort is described as continuing to persevere despite setbacks, whereas interest is described as sustaining sufficient interest in goals over time as to be likely to meet them. While Duckworth and colleagues (2007) described grit as a fairly stable trait over time, it does not

correspond to talent. Individuals with or without grit may be comparable in terms of talent possessed toward a given goal (Duckworth et al., 2007). Von Culin, Tsukayama, & Duckworth (2014) found that “grittier” individuals are more likely to be motivated by seeking engagement and meaning in their work. They seem to derive happiness from orienting toward engagement in work, whereas those who orient toward deriving pleasure are less likely to sustain their interest and goals over time (Voni Culin et al., 2014). Grit, like other SEL skills, has been related to positive academic and vocational outcomes, as well as successful completion of challenging goals in spite of barriers (Duckworth et al., 2007).

Students may face significant challenges in acquiring such SEL skills. This is particularly true of students who have been exposed to adverse life circumstances. However, SEL skills can be taught (CASEL, n.d.). Explicitly teaching such skills has been linked with improvement in the specific skill taught, as well as with broader influence on student attitudes and beliefs about themselves, others, and school (Durlak, Weissberg, & Pachan, 2010), CASEL, n.d.). Three SEL concepts particularly relevant to the Hispanic/Latino college population are sense of belonging, growth mindset, and self-management. The sections that follow elaborate upon these constructs and their theoretical relationships to other SEL concepts.

Sense of belonging. Falling under CASEL’s social awareness area of competency, sense of belonging broadly implies a feeling of social connectedness. It is defined as the experience of personal involvement in a system or environment so that individuals feel themselves to be an integral part of that system or environment. In the college setting, this includes a sense of fellowship with peers and teachers, as well as an overarching sense of comfort in the university community (Dweck, Walton & Cohen, 2011). The need to experience belonging is a fundamental drive to obtain lasting positive interpersonal relationships (Baumeister & Leary;

Osterman, 2000). Belonging is synonymous with relatedness (Osterman, 2000) and connectedness (Wilson & Gore, 2013). Students who experience a sense of belonging are more likely to have positive attitudes toward class assignments, exhibit more engagement in school, participate more in school activities and invest more effort in the learning process. Several studies have linked a sense of belonging to positive outcomes such as greater academic motivation (Goodenow & Grady, 1993; Anderman & Anderman, 1999). The perception that one is socially supported has also been shown to be a buffer from developing mental and physical health problems (Bolger, Zuckerman, & Kessler, 2000).

Growth mindset. The concept of growth mindset stems from theories of implicit beliefs. It holds that an individual's underlying, unconscious beliefs shape his or her inferences, judgments, and reactions. Dweck, Chi-yue, and Ying-Yi (1995) describe this phenomenon to be particularly salient when people are faced with interpreting negative events. These researchers first described the concept of growth mindset as incremental theory, which holds that personal attributes are malleable and can be changed incrementally over time. Entity theory, in contrast, holds that personal attributes are fixed. Individuals believing in an entity theory are more likely to interpret others' and their own behavior as a reflection of their traits. This has implications for negative events, which are thus more likely to be internalized as a negative reflection of some core aspect of the individual's personality. Entity theorists are thus more likely to react in a helpless manner when faced with a setback. Incremental theorists, in contrast, are more likely to interpret the failure in terms of effort or strategy employed, making them more likely to change their behavior and chip away at the problem to find a solution (Dweck et al., 1995).

When discussing intelligence, a growth mindset implies that intelligence is a malleable construct that can be increased with effort and learning. This type of mindset directly opposes a fixed mindset, which holds that intelligence is a fixed quantity. Individuals with a fixed mindset believe that people possess a certain level of intelligence or talent and this level cannot be changed substantially. Conversely, in a growth mindset, “brains” and talent are only a starting point from which to improve through dedication and effort. Growth mindset interventions have been developed to challenge the myth that raw ability matters most. These have typically relied on the following formula for success: effort + strategies + help from others (Dweck, Walton & Cohen, 2011). Growth mindset has been conceptualized as related to grit, in that those who hold a growth mindset may be more likely to persevere in the face of obstacles. Based on this, it has been suggested that targeting growth mindset may be a way to promote grit, although further research is needed to fully understand the nature of this theoretical link (Duckworth & Gross, 2014).

Research does support a linkage between a growth mindset and higher self-efficacy. Bandura (1989) defined self-efficacy as the individual’s belief in their ability to meet task demands. This belief is applicable to different domains, such as social self-efficacy, affective self-efficacy, and cognitive self-efficacy. Solberg (1993) later defined college self-efficacy as the student’s belief in his or her ability to perform the task demands involved in various college-related tasks. Solberg (1993) identified these various tasks as including self-efficacy within interpersonal relationships, coursework, and roommate interactions. In college, goal self-efficacy, or the individual’s belief that he or she can achieve their goals, is directly linked to actual goal progress (Singley, Lent, & Sheu, 2010). It has been demonstrated that growth mindset is linked to greater self-efficacy. For example, Karwowski (2014) focused on creativity

and found that those individuals who perceive such a talent as malleable are also markedly more likely to rate themselves as sure of their ability to engage in creative tasks. It follows that those who believe they can change their talent or intelligence are also more likely to believe in their competency within that particular domain.

Self-management. Self-management includes the ability to target a goal and use self-control strategies to make progress toward the goal (Kazem, Rice, Rylander, & Morgan, 2011). This implies that the individual acts as the primary causal agent in his or her life, making decisions with minimal external interference. Wehmeyer (1997) identified four essential characteristics of self-management based on the purpose of the behavior: (1) The person acts autonomously; (2) behaviors are self-regulated; (3) the person initiates and responds to events in a psychologically empowered manner; and (4) the person acts in a self-realizing manner (Wehmeyer, 1997). For university students, self-management involves the ability to make effective choices and decisions about his or her life, free of outside influences or distractions. This includes goal setting, motivation, self-control, and managing stress and emotions.

The self-regulation aspect of self-management has been related to the theoretical concept of grit, although it remains a distinct domain. Self-regulation, or self-control, involves exerting control over one's attention, emotions, and actions. Duckworth and Gross (2014) propose that goals are more likely to be pursued if they are both desirable and achievable. They describe a hierarchical process of goal setting that consists of both higher and lower order goals, with lower order goals serving as stepping-stones to overarching goals. Individuals tend to have fewer, more abstract, higher order goals and more numerous, context-specific, and short-term goals. Grit is represented by commitment to achieving the overarching goal by following a well-organized path through lower order goals. This requires self-control, which is represented by

working toward the lower order goals by inhibiting impulses to work toward other goals (e.g. watching television). When an obstacle is in the way of the higher order goal, “gritty” individuals are likely to find a new path amongst their short term goals or to create a new short term goal altogether. Thus, a commonality between grit and self-control is the need to “defend” valued goals when faced with obstacles. Individuals who struggle with self-control might continue to maintain the same long-term goal, but struggle to reach it based on difficulties inhibiting impulses during everyday life. Research has preliminarily indicated that self-control may be more trainable than the overarching “grit” concept, although further work is needed to examine the link between self-control training and overall grit (Duckworth & Gross, 2014).

Furthermore, the role of motivation in self-management has been widely explored. Deci and Ryan (2000) examined relationships between intrinsic and extrinsic motivation and persistence and commitment to education. They found that intrinsic, or internal, motivation is more aligned with academic success than extrinsic motivation by money or other incentives. Extrinsically motivated students tend to show less interest in school, blame others for their mistakes or failures, exhibit less excitement about their education, and are ultimately less likely to persist (Simons et al., 2004). Conversely, intrinsic motivation is related to resilience and persistence in the face of adversity. It has also been linked to positive academic outcomes (Deci & Ryan, 2001).

Several methods of promoting intrinsic motivation have been studied. Intrinsic motivation can be increased by a focus on the satisfaction and pleasure of education, as well as educational self-efficacy (Deci & Ryan, 2001). Openness to a wide range of college experiences and learning opportunities, not just academic, is also important (Prabhu, Suttan, & Sauser, 2008). Students who set mastery, or learning, goals focus on development of

competence and tend to view the process of learning as important. Conversely, students who set performance goals focus on achieving positive recognition of competence or avoiding negative judgments about competence (Button, Mahieu, & Zajac, 1996; Harackiewicz & Elliot, 1998). Mastery goal setting is linked to intrinsic motivation because such a process involves seeking out challenges and being persistent. Performance goal orientation with a focus on avoiding negative judgment, in particular, has been linked to maladaptive interpretations of failure. These individuals are more likely to attribute failure to poor internal ability and to give up entirely. Individuals with a mastery goal orientation, in contrast, tend to react to failure as an opportunity to improve upon feedback (Button et al., 1996). Despite this, performance goal orientation has been shown in other work to have some utility in promoting intrinsic motivation. Performance goal setting can promote intrinsic motivation because the student thinks about the value of his or her work, which promotes effort and internal value placed on the experience. This seems to be more adaptive for those who work for positive recognition as opposed to those who work to avoid negative recognition. When present *in conjunction* with a mastery goal orientation, some level of performance goal orientation can be adaptive (Harackiewicz et al., 1998).

Social Emotional Learning & Resilience

Social emotional learning involves skills, such as those just described, that are implicated in the development of resilience. In the field of intervention and prevention science, resilience is a concept that has been widely discussed when conceptualizing youth development and when creating interventions. Resiliency theory is based in the idea that individual strengths, rather than weaknesses, may shape an individual's response to stress or adversity in such a way that the individual grows up to be psychologically healthy (Zimmerman, 2013). That is, of individuals that face adverse life circumstances like poverty, family stress, or exposure to community

violence, some seem to succeed despite these obstacles, while others experience difficulties. People who adapt and overcome have been described as resilient, although such individuals do experience pain or distress as all people do. A body of work has investigated how to promote resilience, and it has been shown that individuals can learn and develop more resilient behaviors and thoughts (Bernard, 1991). Thus, resilience research has informed theories of child and adolescent development, as well as interventions aiming to bolster resilience in youth and adults (DeRosier, Frank, Schwartz, & Leary, 2013; Fergus & Zimmerman, 2005; Zimmerman, 2013).

While much research literature identifies factors that place certain students at risk for negative outcomes, resiliency theory addresses *promotive factors*, which are strengths that assist in overcoming obstacles. Two types of promotive factors have been identified, called assets and resources. Assets are internal positive attributes. Particularly salient to resilience is self-esteem, self-efficacy, and holding a positive view of self (Fergus & Zimmerman, 2005; Zimmerman, 2013). Problem solving skills such as the ability to plan, seek help, and engage in creative thought also help build resiliency. Holding a purpose and belief in the future has also been linked to increased resilience, in that goal direction and meaningful aspirations appear to help the individual persist in challenging times. The ability to think flexibly and accept that changes or difficult times are surmountable is also important (Benard, 1991; Comas, Luthar, Maddi, Saakvitne, & Tedeschi, 2016). Resources, on the other hand, are external factors that promote resilience. Research has repeatedly demonstrated that caring relationships are critical to resilience, although students may find this support within their family or in other positive adults. Research has also indicated that an environment and adult mentors who promote high expectations for the individual help build resiliency, as do messages that the individual's contributions and participation is valued. Cultivating such relationships and environments assist

youth in feeling that they belong in their world and are capable and supported in their endeavors (Benard, 1991; Comas et al., 2016).

Both internal and external characteristics support healthy development and both have been targeted as a means of bolstering youth resiliency. For example, skill-building programs might specifically target children's assets like self-esteem, or a campus climate program might aim to build supportive student relationships with mentors and cultivate high aspirations for all students (Fergus & Zimmerman, 2005; Zimmerman, 2013). Many of the assets and resources known to contribute to resilience are social and emotional characteristics, and it is thus not surprising that SEL programming has been linked to higher levels of resilient attitudes and behavior. Furthermore, strong SEL skills have also been related to overall improved mental health, which also goes hand in hand with resilience, as research has demonstrated the two to be highly correlated. The theoretical linkages between resilience, SEL, and mental health are evidenced in the college population, which has been repeatedly reported to experience a great deal of stress. While SEL programming has been less studied in college students, SEL skills are known to increase both resilience and positive mental health in university students (Hartley, 2011). Psychological health and the ability to approach obstacles in a resilient way contribute to college success. As previously mentioned, this success includes intellectual, emotional, and social growth, as well as traditional benchmarks like college persistence and graduation. A diagram of the theoretical relationships between social emotional learning, resilience, mental health, and holistic college success is provided in Figure 1.

Student Success in College

During college, demands on the student's adaptive resources increase, as students are required to balance competing demands at a rate that was not required during high school.

Students must learn to be more independent than ever, and stress levels at this time have been found to be relatively high (Arnett, 2004). At the University of North Carolina at Chapel Hill, for example, health survey data collected over the past several years demonstrate that many students struggle with emotional aspects of the college experience. In 2013, 60% reported that they felt overwhelmed at some point in the last two weeks, with 22% percent reporting overwhelming anxiety and 22% reporting feeling very sad during the last two weeks. Sixty-one percent of students reported that they felt very lonely in the past year (American College Health Association, 2013). Furthermore, assessment of freshman data indicated that these students' social and emotional difficulties increase during the first year. From the fall to spring semester freshmen generally increased by five to eight percent in their self-reports of feeling overwhelmed, exhausted, under more than average stress, very lonely, and "so depressed it was difficult to function" (American College Health Association, 2010). Such elevated levels of stress, loneliness, anxiety, and sadness have been implicated in students' withdrawal from college before graduation. From 2012 to 2013, for example, 20% of 4-year institution students withdrew from college and 40% of 2-year institution students did not persist. These numbers have remained relatively stable over the past few years (National Center for Education Statistics, 2015).

Given the numbers of students leaving college without a degree, adaptively coping with these social and emotional challenges is thought to be critical to college persistence and retention, as well as to student development. Tinto (1993) developed an early model for student attrition and persistence, emphasizing that postsecondary variables are more important than pre-college factors like high school grade point average (GPA). His model outlined commitment to institution, goal commitment, and campus integration as key predictors of student success and

college persistence. He also posited that campus integration would increase commitment to the institution and thus degree attainment (Tinto, 1993). Since Tinto's model of persistence was developed, research has reiterated the idea that a variety of postsecondary factors contribute to a successful college career, including individual characteristics, family interactions, community dynamics, and broad societal influences (Katz & Somers, 2015). Academic preparedness plays a role in students' ability to meet educational demands, but first semester GPA better predicts academic performance later in college than does high school GPA. (DeBerard, Spielmans, & Julka, 2004). Academic performance in the first semester, as well as subsequent college persistence, is significantly impacted by factors outside of pre-college academic preparedness (Katz & Somers, 2015; Nagoaka et al., 2012; Robbins, Allen, and Casillas, 2006).

Nagoaka and colleagues (2012) defined such "non-cognitive" factors as behaviors, skills, attitudes, and strategies that contribute to college performance. These include academic behaviors such as arriving prepared to class and developing good study skills and work habits. Academic perseverance is also important and involves remaining focused and engaged despite setbacks, frustrations, and distractions. Perseverance is influenced by student mindset about their work and development of functional learning strategies (e.g. use of metacognitive strategies to aid memory, problem-solving skills). A positive academic mindset implies positive perception of the self with relation to learning and intellect, a belief that success is possible, ability is linked to effort, and that work has value. This has been linked to increased motivation to persevere. Sense of belonging has also emerged as an important factor. Social skills may also impact sense of belonging, as skills like cooperation, assertion, and empathy increase the odds of successful relationships with peers (Nagoaka et al., 2012).

Other studies addressing college persistence have found similar results. Robbins and colleagues (2006) studied 14,464 students from 48 universities and colleges. The most salient contributors to academic outcomes were academic discipline and commitment to college, followed by self-management skills (Robbins et al., 2006). Katz & Somers (2015) found that the two most critical factors were coping ability and perception of university environment. Social support mediated individual characteristics and successful adjustment (Katz & Somers, 2015). DeRosier and colleagues (2013) examined factors that promote resilience in college, which has been related to higher student self-esteem, positive psychological wellbeing and the ability to cope with academic and time management stressors. Social connections in the university setting were found to be crucial to resiliency, and flexible coping skills, self-regulation, and positive cognitive styles were also important (DeRosier et al., 2013). A number of other studies have reiterated that a sense of connectedness to peers and the university community plays a significant role in college persistence (Pittman & Richmond, 2008; Tinto, 1987). Self-care behaviors like exercise, nutrition, good sleep habits, and treating oneself with compassion were related to psychological health (DeRosier et al., 2013). Conversely, risky behaviors (i.e. smoking and drinking alcohol), poor physical health, maladaptive coping skills, and lack of social support have been implicated in poor academic performance (DeBerard, Spielmans, & Julka, 2004).

The literature reiterates several key factors in student success and persistence. Social connectedness and a perception of the university environment and peer relationships are highly important. It appears that social skills may play a role, but that the student's beliefs and attitude about his or her belonging is pivotal. Furthermore, the literature emphasizes the need for adaptive coping skills to address stress and challenges. Perseverance and commitment to goals is also repeatedly noted, although terms used in the literature range from "academic discipline" to

“goal commitment” to “academic perseverance”. These factors are critical to all students entering college, but certain groups may encounter unique barriers that increase their likelihood of struggling with these skills.

Barriers to College Success for Hispanic/Latino Students

Students particularly likely to encounter barriers to college success are those with disabilities, minority populations, and first-generation college students (Adam & Proctor, 2010; Adebayo, 2008; Aspelmeier, Love, McGill, Elliott, & Pierce, 2012; Petty 2014; Smith & Zhang, 2011). Minority students’ college enrollment rates have increased over the past few decades. However, there is still a significant gap between minority student college enrollment (50% to 68%) and their majority peers (75% to 80%). This enrollment gap becomes more pronounced when socio-economic status (SES) is factored into the equation (Strayhorn, 2011). Furthermore, one study indicated that Mexican American students had the highest rates of withdrawal from college during the first year (Hawley & Harris, 2005). A number of specific barriers have been identified that increase the likelihood that these students struggle to meet college demands and graduate. The following subsections outline the non-cognitive risk factors for minority populations, with particular attention to those specific to Hispanic/Latino students.

Academic and Linguistic Challenges. A substantial body of research has been conducted that indicates that academic preparation is a key predictor for enrollment and retention for students initially entering college. Minority students in general, including Hispanic/Latino students, are particularly at risk for being under-prepared, given the high schools from which they matriculated. They are more likely to have attended high schools with fewer resources, honors and advanced courses, and less prepared teachers. As a result, students in underrepresented populations often require remedial assistance to be successful, which may

leave the student feeling inadequate and academically under-prepared (Strayhorn, 2011). In fact, literature review suggests that remedial assistance for the Hispanic/Latino population has had very mixed success, ranging from helpful to harmful to student outcomes (Crisp, Taggart, & Nora, 2015).

Furthermore, the English language may continue to be a barrier for some Hispanic/Latino college students. Particularly for those who were raised in largely Spanish-speaking homes or Spanish-speaking cultures, coping with the high language demands of academic performance can be daunting. For example, nontraditional Hispanic/Latino students (those age 25 or older upon starting college) in a qualitative study by Arbelo-Marrero and Milacci (2016) described their experience with adjusting to the English demands at a HSI. They cited feeling frustrated at times when they were spending several more hours on homework because the language took them much longer to process. They also described this issue as one that was quite challenging at first but eventually resolved itself based on these students' frequent interactions in speaking English with others and in seeking out faculty support. One student cited the helpfulness of accessing a bilingual faculty member for help. It seems that support networks were critical for these students, whether they be other bilingual students and faculty, or English-speaking supports that provided both support and the opportunity to improve their English (Arbelo-Marrero and Milacci, 2016). While very extensive research exists addressing the language barrier in K-12 education, a large gap in the research exists with regard to the relationship between college second-language acquisition and college outcomes. "Remedial" or "developmental education" college courses have been taken at the highest rates by Hispanic/Latino students, with data showing that these students often continue to underperform in comparison with Hispanic/Latino students not enrolled in these courses. Once again, this research has been limited and has been

done almost exclusively at the community college level, since most Hispanic/Latino students attend two-year institutions (Flores & Drake, 2014).

Stereotype threat and discrimination. Students from underrepresented populations are also at risk for discrimination and the effects of stereotype threat. Stereotype threat theory holds that groups who are the subject of a given stereotype internalize that stereotype, which then causes these groups to perform worse when faced with activities directly implicated by the stereotype. For example, Hispanic/Latino students are often consistently subjected to lower academic expectations and may internalize the stereotype that they are not as academically capable as their peers. Stereotype threat theory holds that these students then perform more poorly when placed in high stakes academic situations, given the activation of the stereotype in their schema for how they will perform. According to work by Gandara and Contreras (2009), a sense of disadvantage is shaped at early ages for Hispanic/Latino students. Throughout K-12 education, Hispanic/Latino students often attend schools that support fewer advanced classes, and Hispanic students often do not perform as well as their white counterparts on standardized tests. Hispanic/Latino students may even be less likely to participate in extra-curricular activities offered by schools because they have reduced access or do not feel a sense of cultural belonging participating in the activities offered (Gandara & Contreras, 2009). Anecdotally, these students report being told by counselors or parents to pursue vocational avenues instead of college (Phinney et al., 2006). Thus, they are frequently faced with stereotype that their culture, language, and ultimately intellect are incompatible with higher education (Gandara & Contreras, 2009).

Research has demonstrated that internalization of such stereotypes is an obstacle to success in college. As a small percentage of the population at predominantly white institutions

(PWIs), Hispanic/Latino students may feel out of place, judged, and pressured to assimilate (Gandara & Contreras, 2009). Hispanics/Latinos at PWIs are more prone to feeling discriminated against and alienated, as they may lack role models with which they can identify. Persistence of stereotypes in the college environment suggests that these students are also often subject to lower expectations, from others and themselves (Gloria & Castellanos, 2003). In a study of Mexican American students at a PWI, feeling unwelcome was associated with poorer academic performance (Gonzalez, 2002). Experiences with discrimination and/or an unwelcoming campus climate have been shown to negatively impact the academic self-confidence of Latinos in college (Nunez, 2009). Given that academic self-confidence and sense of belonging are keys to college persistence, it is not surprising that discrimination and feeling unwelcome have also been linked to lack of persistence in the Hispanic/Latino college population (Gloria & Castellanos, 2003; Nunez, 2009).

Stressors. A number of other stressors are more likely to impact minority college students, particularly Hispanic/Latino students, than their majority counterparts. For example, Hispanic/Latino and African American students are more likely than their white peers to come from low socioeconomic status (SES) families. One study of Mexican American college students indicated that low SES predicts distress (Castillo, Hill, & Robert, 2004). Given the likelihood that these students possess fewer financial resources than many of their peers, Hispanic/Latino students are the most likely of all groups to hold a job during college. This may also be because they are significantly more likely than other groups to report “helping family” as motivation to attend college and are more likely to work to send money to their families concurrently (Phinney et al., 2006). This puts them at risk of having to manage many simultaneous demands (Petty, 2014; Prospero, Russell, & Vohra-Gupta, 2012). Often because

Hispanic/Latino students carry a job or feel compelled to attend to family responsibilities, they are also the most likely group to enroll part time in college. Full time college enrollment has been found to be a predictor of eventual degree attainment, whereas part time enrollment has been linked to decreased odds of graduation (Arbona & Nora, 2007). Hispanic/Latino college students are also the most likely to be older than their peers, which may be related to the higher part-time enrollment and barriers such as holding a part time job and attending to family responsibilities (Aguayo, Ojeda, Herman, & Flores, 2011). These stressors, particularly carrying a part time job simultaneously, have been negatively associated with college persistence and success (Arana, Castaneda-Sound, & Aguilar, 2011).

Challenges associated with first generation status. Hispanic/Latino students are more likely than their white counterparts to be the first in their family to attend college, often identified as “first generation students” (Martinez, Sher, Krull, & Wood, 2009). This subpopulation often includes students who identify as a minority and come from economically disadvantaged backgrounds (Aspelmeier et al., 2012; Martinez et. al., 2009; Petty, 2014). They tend to experience less sense of purpose for attending college than their peers, see themselves as less prepared, and may hold more negative attitudes about their potential (Aspelmeier et al. 2012; Próspero et al., 2012). Furthermore, families of these students often struggle to be emotionally supportive because they lack an understanding of university culture and demands. Many first generation students also face challenges in making the same social connections as their peers. This creates a sense that they do not fully belong in either of their two worlds (Petty, 2014; Próspero et al., 2012). These factors lead to negative outcomes such as lower self-esteem, lower college grade point averages, and higher rates of early college withdrawal. Prospero and

colleagues (2012) reported that these students are 71% more likely to leave college without a degree than their non-first generation peers.

Promotive Factors for Hispanic/Latino Students

Despite these challenging circumstances, researchers have also identified promotive factors that bolster these students' ability to be successful in college. For minority students, research has indicated that possessing a support person, long-term goal setting skills, and the ability to understand and manage thoughts regarding racism were important non-cognitive factors. Fostering a sense of belonging and a growth mindset is linked to positive academic outcomes (Walton & Cohen, 2011; Cook, Purdie-Vaughns, Garcia, & Cohen, 2012; Dweck, Walton & Cohen, 2011). Brief sense of belonging interventions may lead to long-term academic outcomes such as improvements in GPA (Walton & Cohen, 2007, 2011). In a meta-analysis of 190 studies prior to 2012, Crisp et al. (2015) examined factors that contribute to Hispanic/Latino college success, which was measured through GPA, course grades and completion, vertical transfer from two to four year colleges, and degree completion. Academic self-confidence was found to be an important predictor, as was social support and perception of the college climate as supportive and nondiscriminatory (Crisp et al., 2015). Furthermore, fostering growth mindset has been shown to enhance semester grades, motivation, and academic enjoyment for minority students (Aronson, Fried, & Good, 2002; Blackwell et al., 2007). The following subsections specifically outline promotive factors that have been found to be most predictive of Hispanic/Latino college success.

Self-efficacy and growth mindset. Since the 1990s, self-efficacy has been repeatedly linked to reduced distress and positive outcomes for Hispanic/Latino college students (Aguayo et al., 2011; Gloria, Castellanos, Lopez, & Rosales, 2005; Solberg & Villareal, 1997). Solberg &

Villareal (1997) found that perceived self-efficacy explained 29% of the variance in reported level of distress, with greater self-efficacy correlating with less distress. Furthermore, self-efficacy has been related to higher academic performance and college persistence for Latino students. For Mexican American students born in the United States, college self-efficacy was related to higher college GPA at a HSI (Aguayo et al., 2011). Greater persistence has also been associated with placing value on education and educational self-efficacy (Bordes-Edgar, Arredondo, Kurpius, & Rund, 2011; Gloria et al., 2005). In one study of Mexican American students at a HSI, self-efficacy was found to mediate the relationship between positive affect and academic goal progress, suggesting that positivity alone was not enough to reach goals. Not only was self-efficacy important for reaching goals, it was also predicted academic satisfaction and positive expectations for college outcomes (Ojeda et al., 2011).

More recently, the concept of growth mindset has been examined in conjunction with self-efficacy as a promotive factor for Hispanic/Latino and other minority students. Underrepresented college students are more likely to internalize academic failures as indicative of lesser innate ability, which is the hallmark of a fixed mindset and inherently counter to self-efficacy. A growth mindset is useful in combatting faulty attributions and negative beliefs about ability that have been entrenched by stereotype threat and discrimination (Dweck, Walton & Cohen, 2011). Thus, growth mindset has been closely linked to increased self-efficacy (Journden, Bandura, & Banfield, 1991; Karwowski, 2014). Jourden and colleagues (1991) found that college students who were led to believe that performance was an acquirable skill showed increased self-efficacy, positive self-concept, and greater skill acquisition on a motor task. This study, however, was conducted with a broad group of college students and only included a very small number of Hispanic/Latino students (Jourden et al, 1991). Thus, further research is

needed to understand the specific link between Hispanic/Latino self-efficacy and growth mindset.

Such research is particularly needed because growth mindset intervention has been linked to increased motivation, higher academic achievement, greater academic enjoyment, and college persistence. Blackwell and colleagues (2007) investigated these connections in a group of inner New York City middle school students who were largely African American (52%) and Hispanic (45%). They found that a growth mindset promoted motivation, achievement and grades over two years among adolescents (Blackwell et al., 2007). Test score improvements have also been indicated in other studies (Yeager & Dweck, 2012; Good, Aronson, & Inzlicht, 2003). For example, Good and colleagues (2003) noted such improvements in their sample of predominantly Hispanic (63%) seventh grade students in rural Texas. In another study, Aronson and colleagues (2002) taught African American and white college students the growth mindset concept. In having these students then explain malleability of intelligence to middle school children via a “pen pal” format, the college students internalized the concept. For both African American and white students, grades improved for those in the pen pal group. Interestingly, however, reported academic enjoyment persisted over time only for the African American students, whereas it dissipated for white students (Aronson et al., 2002). Growth mindset intervention staged the summer before a student’s first year in college can increase the percentage of students taking twelve or more credits during their first term from 3-10%. Taking twelve or more credits first semester has been a strong predictor of on-time graduation (Yeager et al., 2013). Much of this growth mindset work has been done with younger Hispanic/Latino adolescents, as in the work of Blackwell and colleagues (2007) and Good and colleagues (2003),

or with African American college students (Aronson et al., 2002). Thus, further investigations of the utility of these interventions with the college Hispanic/Latino population are needed.

Sense of belonging. A sense of belonging is particularly important for all students as they begin college, due to stress associated with a new environment, increased autonomy, academic pressure, and potential loneliness (Spitzer & Aronson, 2015; Wilson & Gore, 2013). Students are experiencing the loss of some pre-college relationships and struggling to identify new friends. Not surprisingly, initial positive interactions with faculty and peers are important components of academic success. Feeling socially accepted and supported by peers and staff alike promotes a high level of connectedness (Wilson & Gore, 2013). For college students, a greater perceived sense of belonging is associated with better grades, perceived academic competence, increased self-worth and fewer externalizing behaviors (Pittman & Richmond, 2008). Greater sense of belonging has also been linked to self-efficacy and the perception that class tasks are valuable, thus increasing motivation (Freeman, Anderman & Jenson, 2007).

Underrepresented and socially marginalized groups have different experiences when it comes to sense of belonging (Goodenow & Grady, 1993; Hurtado & Carter, 1997). Members of such groups, such as Hispanic/Latinos, may become uncertain about their social belonging in mainstream institutions. They may struggle to identify culturally with their peers but may also have difficulty garnering support from their family, as many are first-generation college students whose families may not fully grasp the nature of college demands (Prospero, Russell, and Vohra-Gupta, 2012). Walton and Cohen (2007) investigated the concept of belonging uncertainty with African American college students, who face stigma and insecurities similar to those faced by Hispanic/Latino students. In comparing their sample of white and black college students, they found that stigmatized groups tend to be more insecure about the quality of their social bonds

with others, therefore feeling lower overall sense of belonging. Minority students may be particularly prone to this feeling, given that when they observe the cultural composition of their educational environment, they are underrepresented, particularly in positions of authority (Walton & Cohen, 2007). This uncertainty about belonging can co-occur with perceived negative social-academic experiences, such as loneliness or criticism from an instructor. Students may perceive this as evidence that they do not belong (Yeager & Walton, 2011). Unfortunately, belonging uncertainty can occur in the absence of negative feedback and has been shown to undermine motivation, achievement, and overall health (Walton & Cohen, 2007; Wilson & Gore, 2013).

On an optimistic note, a positive sense of belonging has been shown to foster student success in Hispanic/Latino student populations. In a qualitative study by Arana et al (2011), Hispanic/Latino students at a HSI cited motivation and support from family and friends as critical to persevering in college. A supportive college climate also emerged as important, with students noting that the shared cultural experience at the HSI helped them feel welcome. In creating that supportive climate, students also emphasized the need for supportive relationships with faculty and ample social and recreational opportunities that provide a niche for everyone (Arana et al., 2011).

Gloria and colleagues (2005) also determined that positive campus climate and a sense of “fitting in” were related to Hispanic/Latino college persistence. During the first year, a critical time for potential dropout, the decision to persist has been linked to a sense of support from freshman peers. Bordes and colleagues (2011) found that during later college years at a four-year university in the U.S. southwest, the experience of having a mentor of any race was most heavily related to successfully graduating. The researchers did not specify whether their study

was conducted at a PWI or HSI (Bordes et al., 2011). Similarly, Saunders and Serna's (2004) qualitative study found that college persistence in first generation Hispanic/Latino students was related to feelings of social support, as well as an understanding of the formal structure of the university. Their study was conducted with ten students who attended the same public high school in California and then attended different four-year institutions (Saunders & Serna, 2004). In a study of 247 Mexican American college students enrolled at different accredited universities or liberal arts colleges, the researchers found that perceived social support was negatively correlated with distress (Castillo & Hill, 2004).

Interventions for increasing social connectedness have been successful in bolstering college performance in minority populations. They aim to address social belonging early on, given that early perception of social experiences is one of the most prominent predictors of social connectedness (Wilson & Gore, 2013). On the individual level, interventions for sense of belonging work by changing students' subjective experiences of their environment. Walton and Cohen (2007, 2011) tested whether a social connectedness intervention implemented with freshmen college students would have differential impact on black and white students. In a one-hour intervention, students read a survey indicating that many college students feel they do not belong in college at first but that this changes over time. They then wrote an essay to incoming freshmen to share this message and their personal experience with it. The intervention impacted the black students positively in that those in the treatment group earned higher GPAs through their senior year of college, closing the black-white achievement gap by 25% (Walton and Cohen, 2007; 2011). Another method, value affirmation, encourages students to recall values that are important to them. Reminding students of their values provides a buffer to sense of belonging when negative experiences occur. Cohen and colleagues (2009) implemented such an

intervention with adolescent African American students and found that their GPA increased by .21, with initially low achieving students' GPA's increasing by .41. These students also reported feeling buffered from stereotype threat (Cohen et al., 2009). These interventions have been largely conducted with African American college students, however, and thus warrant further exploration with the Hispanic/Latino student population (Yeager & Walton, 2011).

Familismo and biculturalism. A number of studies have examined acculturation and the Hispanic/Latino concept of “familismo” as related to sense of belonging and college outcomes. Familismo implies a strong attachment and loyalty to family members but has also been applied to feeling a strong sense of community on the college campus. The concept of familismo seems to be founded more in finding like-minded individuals than those necessarily of the same race or ethnicity. This has been mostly studied at Hispanic Serving Institutions (HSIs), but this research suggests that developing a sense of community or university “familia” is helpful in translating Hispanic/Latino values to the college environment and promoting a sense of belonging (Segura-Herrera, 2006). For example, in a qualitative study at an HSI, many Hispanic/Latino students noted that fostering the cultural value “just keeping going” (when challenged) was helpful in motivating perseverance and resiliency (Consoli & Llamas, 2013).

Biculturalism involves identification with both Hispanic roots and mainstream university culture. A few studies, mostly done at HSIs, have found biculturalism to be related to self-efficacy and comfort in the college environment (Aguayo et al. 2011; Castillo, Conoley, Choi-Pearson, Archuleta, Phoummarath, & Van Landingham, 2006). Ojeda, Flores, and Navarro (2011) found that biculturalism is important for Mexican American college students at an HSI. Enculturation, or perceived closeness with one's ethnic group, was linked to self-efficacy. Acculturation, however, was also linked to self-efficacy, as well as positive expectations for a

college education. This is consistent with other literature suggesting that familiarity with beliefs of mainstream culture about education are critical to forming academic self-efficacy and understanding benefit of college (Ojeda et al, 2011). Students with only a high ethnic identity tended to perceive their environment more negatively and felt they did not belong. This was found to be particularly true if the principles of the university conflicted with the cultural values and beliefs of the student. Despite this, in a study of 175 Hispanic/Latino students a PWI, sense of belonging was found to mediate the relationship between ethnic identity and college persistence (Castillo et al., 2006). Ojeda and colleagues (2011) suggest that while upholding their values, Hispanic/Latino students may benefit from interventions helping them to focus on setting future goals and expectations, which is more consistent with the individualistic and future-oriented nature of mainstream culture (Ojeda et al., 2011). Overall, however, research does not make clear to what extent it is best for students to identify with their cultural roots versus the mainstream culture. Thus, the implications for programming are difficult to determine. The implications for programming at PWIs is further complicated by the fact that the large majority of this research has been conducted at HSIs, where students' sense of cultural identity is likely influenced in a different way by the larger Hispanic/Latino community. What is clearer, however, is that sense of belonging mediates the relationship between cultural identity and college persistence and success at a PWI, lending further support to programming that addresses the Hispanic/Latino student's sense that he or she is part of the community (Castillo et al., 2006).

Self-management. At the college level, many students struggle with self-management, particularly while adjusting to college demands and responsibilities. Minority students are particularly at-risk for stress and self-management difficulties, as they are most likely to juggle

competing demands like family obligations and a part-time job (Petty, 2014; Próspero et al., 2012). Not surprisingly then, Le, Casillas, Robbins, & Langley (2005) found that emotional control skills were one of five highly predictive factors of minority student college academic performance and retention. Their study was conducted with 6,456 students across different two- and four-year institutions, with 33% of the sample being minority students (Le et al., 2005). In broad studies of Hispanic/Latino students at four-year institutions, managing negative thoughts and emotions regarding racism have also been identified as key non-cognitive factors for these students (Gandara & Contreras, 2009; Nunez, 2009).

Having high expectations and setting concordant goals has been helpful in promoting Hispanic/Latino academic success at the college level. Lohfink & Paulsen's (2005) analysis of national survey data found that Hispanic/Latino first generation students who had high educational aspirations were more likely to persist from first to second year of college. In a qualitative study of factors that promote Hispanic/Latino college achievement at a HSI, setting high expectations and explicitly setting high goals were the most recurring themes cited by the eleven Hispanic/Latino participants. One particularly frequent idea was that of "persistence", or demonstrating effort toward goals in spite of obstacles like low SES or difficulties associated with the college transition (Cavazos, Johnson, and Sparrow, 2010). Other studies have provided support for such qualitative reports. Le and colleagues (2005) identified goal setting as one of the five most predictive factors of academic performance and retention for minority students. Furthermore, Hispanic/Latino students have been found to experience less sense of purpose for attending college than their peers (Aspelmeier et al. 2012; Próspero et al., 2012). Goal articulation has been shown to promote and internalize a sense of purpose, highlighted by Morisano and colleagues' 2010 study conducted with white (56.5%) and minority (43.5%)

students who had GPA's below 3.0 at a PWI. Promoting intrinsic, or internal, motivation has been shown to lead to higher levels of academic achievement for Hispanic/Latino students when studied at an HSI and in a broader national survey sample (Kaufman, Agars, & Lopez-Wagner, 2008; Próspero et al., 2012). Petty's 2014 review of literature addressing first generation student success included several studies with high Hispanic/Latino student participation. It suggested that activation toward goal-oriented behavior is also key in helping students learn to juggle their multiple responsibilities and devote sufficient time to schoolwork (Petty, 2014).

A number of interventions have demonstrated success in bolstering minority and Hispanic/Latino self-management skills in order to promote college success. Kazem et al (2011) found that explicitly teaching self-management skills to Hispanic/Latino (33% of sample) and white (32%) students was linked to higher academic productivity and scores, better test taking and study skills, and decreased nervous behaviors like smoking, nail biting and teeth grinding. Encouraging students to articulate a specific vision for the future has been identified as a key step in goal setting and promoting self-determination, although this work was done with minority students and not specific to the Hispanic/Latino population (Morisano et al., 2010). Duckworth, Grant, Loew, Oettingen, and Gollwitzer (2011) also identified mental contrasting as an effective technique for goal setting when they studied adolescent minority students, although most minority students in the sample were African American. This involves identifying the goal, the positive outcome associated with it, and potential obstacles for reaching the goal. They also refer to "implementation intention" as specifying where, when, and how the obstacles will be overcome. This level of specificity promotes engagement and motivation toward the goal (Duckworth et al., 2011). Also supporting goal-oriented behavior is the implicit theory of willpower. Job and colleagues (2013) explored the effect of a non-limited theory of willpower

(i.e. challenging tasks energize the will to engage in further challenge) as opposed to a limited theory of willpower (i.e. challenging tasks deplete willpower and further challenge cannot be engaged without refueling). Their findings support the idea that instilling students with a non-limited theory of willpower influence their ability to persist in challenging situations and exert self-control. Again, however, this study was conducted with 176 college students at a four year PWI and race/ethnicity demographics were not described (Job et al., 2013). While Kazem et al.'s (2011) study included a large group of Hispanic/Latino students, the other studies included only limited numbers of such students, and thus further exploration is needed to determine the application of such interventions to this student population.

Existing Programming

A number of university programs have been developed with the goal of facilitating college student success, some with the purpose of specifically addressing the needs of underserved populations. Literature regarding risk or promotive factors is ripe for informing SEL intervention. For example, Katz and Somers (2015) studied 240 college freshmen at a large four-year institution and suggest possible early screening of college freshmen that use poor methods of coping or are very shy. Such screening might lead to early intervention for at-risk students. Their findings also suggest possible utility in preventative universal programming to address coping with high stress situations, since many students at some point experience these during their college careers (Katz & Somers, 2015). Yet there is still a significant need for programs that address risk and promotive factors, particularly for the Hispanic/Latino population. The following section outlines existing programming, most of which has targeted orientation to the university and access to resources, academic preparedness.

College student success programs. To date, there has been mixed success regarding the use of university programs geared towards vulnerable populations like Hispanic/Latino students. A variety of university programs have been developed in hopes of improving the retention rates for vulnerable populations, including Hispanic/Latino students. Some have focused on bolstering academic skills, while others have centered on non-cognitive skills. The timing of implementation has also varied, with some taking place before the start of college, and others beginning just after or some time after the initial transition phase (Adams & Proctor, 2010; Strayhorn, 2011). Research into the success of these programs has yielded mixed evidence. Of those that have shown positive effects, most have only been short term.

Upward Bound, a federally funded program, was developed as a pre-college program with the goal of preparing at-risk, low income youth for college. In the 2000-2001 year, 78.7% of all participants were considered low income and first generation college students. 19% were Hispanic (U.S. Department of Education: Office of Postsecondary Education, 2004). The program typically includes a high school academic tutorial portion as well as a residential portion of the program the summer before college begins. The program has been shown to boost social emotional wellness and academic preparedness in high school, as well as postsecondary enrollment rates. It was not shown to boost college GPA or graduation rates (Benders, 2009; Laws, 1999). When Benders (2009) explored potential reasons for the disappointing outcomes, many students reported that financial burden required them to simultaneously hold a job, making the academic demands difficult to handle.

Another type of programming offered prior to the start of college is Summer Bridge Programs (SBPs). As described by Strayhorn, (2011), these programs have the goal of increasing the enrollment of at-risk students and promoting their academic success and retention.

While some include a component of building a sense of community for these students as a part of the program, the central goal is typically to build academic skills and provide academic advising for students who might not have been exposed to a rigorous college prep curriculum in high school or are first generation students. Strayhorn (2011) examined whether SBPs were effective in promoting self-efficacy, sense of belonging, social skills, and academic performance. The investigation, conducted with a sample of 55 minority freshmen at a PWI (27% Hispanic/Latino), supported a positive relationship between SBPs and at risk students' academic skills and academic self-efficacy. Academic self-efficacy was also found to predict first semester grade-point-average (Strayhorn, 2011). Long term follow up for such programs is still needed to see whether effects persist throughout the college experience. Furthermore, these programs vary greatly in terms of their curricula, with the commonality that the focus is usually on academic skills and the programs only sometimes include the college readiness skills investigated in Strayhorn's (2011) study (Sablan, 2013).

Most commonly, colleges implement transition programs under names like "First Year Experience" and "Freshman Orientation." These are typically offered universally as students begin college and aim to facilitate the process of adapting to the university environment. They are often brief and center on imparting knowledge about the university rather than building skills (Jamelske, 2009). While such information and resource sharing is useful, such programs do not address the need for social-emotional skill building that will help students manage the demands and stresses of their new environment (Strayhorn, 2011).

Increasingly, more targeted and comprehensive programs under names like "Freshman Seminar" (or sometimes "First Year Experience") have been introduced across universities. Jessup-Anger (2011) described these programs as typically delivered only to select students and

commonly offered for academic credit hours. Since their inception, they have moved toward including facets such as mentoring and non-academic skill building. Skills targeted have included academic remediation, study skills, time management, note taking, and stress management. Many programs also have the goal of fostering academic connections. These programs may not be uniformly taught across sections with a curriculum, and may only be evaluated for outcomes through the use of end-of-course evaluations (Jessup-Anger, 2011). Jamelske's (2009) study examined a program that placed freshmen in a small seminar, with the goal of increasing student sense of integration into the university, as well as critical thinking, time management, and group research skills. While those course sections that were implemented with fidelity to the program's intended goals yielded higher college retention rates, many sections were not implemented as intended and thus did not confer such benefits (Jamelske, 2009). Other researched programs have shown promising effects on retention and persistence, such as Schnell and colleague's (2003) study of freshmen seminar with 1,700 students at a PWI. Jenkins-Guarnieri and colleagues (2014-2015) also investigated the impact of a first year seminar curriculum that aimed to teach academic learning strategies as well as motivation and university commitment. Their sample size of 342 students was 18% Hispanic/Latino. Results of the study demonstrated that students who participated were more likely to be enrolled full time the following two semesters and were also more likely to be designated as in "Good Academic Standing" based on university academic guidelines (Jenkins-Guarnieri, Horne, Wallis, Rings, & Vaughan, 2014-2015). Other positive results, such as an increased social network on campus, have been associated with participation in such seminars (Jessup-Anger, 2011; Keup & Barefoot, 2005).

One promising intervention specific to Hispanic/Latino students is the “La Casa Away from Casa” program at Wayne State University. Researchers examined the program’s impact on college success over a 9-year period from its beginning to full implementation. 320 students participated during this time. The program focused on increasing academic rigor and raising academic expectations, as well as increased tutoring in core math and English coursework. Equal emphasis was placed on developing faculty and peer mentoring relationships, and a sense of “familia” (family) was also promoted. College retention rates were lowest at the start of the program, second lowest during the transition to full program implementation, and highest during the later years of full program implementation (Gonzalez, et al., 2015). These results indicate promise for interventions that promote sense of belonging amongst Hispanic/Latino students, as well as high expectations and concurrent goal setting.

Much of this programming focuses on resource sharing and orienting to college or bolstering academic preparation. “La Casa Away from Casa” emphasizes the importance of considering environmental aspects like community building, but does not attempt to teach students SEL skills like self-management or growth mindset. While such a program is certainly helpful, there is also a need for programming that specifically addresses the unique barriers faced by Hispanic/Latino and other minority college populations. Research suggests that there are a number of strategies universities can take to promote resilience in first generation students. Given the success of isolated self-management, growth mindset, and sense of belonging interventions with Hispanic/Latino students, there is promise for widespread implementation of such interventions to promote a successful college experience (Aspelmeier et al., 2012; Gloria et al., 2005; Petty, 2014)

Social emotional learning programs. SEL programs offer a framework for college programming that often addresses many of the risk and promotive factors pertinent to Hispanic/Latino students. Participation in SEL programs has been associated with improved SEL skills as well as broad changes in attitudes, emotional health, behavior, and academic performance (Dymnicki et al., 2013; Durlak, Weissberg, & Pachan, 2010). Durlak and colleagues (2010) conducted a meta-analysis of 213 SEL school programs and found four significant outcomes. First, academic performance was an average of 11 percentage points higher for students who received the SEL intervention than those who did not. Second, students' attitudes and behaviors changed. Those receiving SEL programming were more likely to demonstrate motivation to learn, commitment to school, increased time allocated to school work, and overall more positive school behavior. Negative behaviors were also reduced, including disruptive classroom behavior, noncompliance, aggression, discipline referrals, or acts of delinquency. Last, fewer students exhibited emotional distress like depression, anxiety, stress, or social withdrawal (Durlak et al. 2010).

CASEL has advocated for the promotion of the SEL competencies throughout the education process, beginning as early as preschool and continuing through college, although the bulk of research and intervention has been conducted with elementary age children. Some has been conducted at the middle and high school levels (CASEL, n.d.). Although there has been little SEL-specific programming at the college level to date, brief interventions for SEL skills in at-risk college populations suggests that such methods may also be effective for Hispanic/Latino college students (Good et al., 2003; Gonzalez et al., 2015; Kazem et al., 2011). Furthermore, SEL programs have demonstrated success in building resiliency and positive mental health outcomes in Hispanic/Latino students at younger ages (Castro-Olivo, 2014).

One SEL program that has garnered positive results specifically in the Hispanic/Latino population is the *Jovenes Fuertes* adaptation of the *Strong Teens* SEL program. 102 Hispanic/Latino adolescents in middle and high school in California participated in the study. A little over 50% were born in a Spanish-speaking country, whereas the rest were born in the United States. Most indicated that Spanish was their primary language. The researchers adapted the English version of *Strong Teens* by first translating it into Spanish and then submitting it for review by bilingual and bicultural individuals. Using theory as a guide, they also added culturally relevant content and used focus groups and expert consultation to finalize the adaptation. The program consisted of 12 weekly sessions emphasizing SEL skills like self-awareness, social awareness, problem solving, anger management, responsible decision-making, goal setting, and reframing maladaptive thoughts. Two bilingual teachers facilitated each group. Each received four hours of training on SEL theory and social emotional needs specific to English Language Learners (ELLs). Changes in social emotional resiliency in the treatment group from pre to post-intervention were measured with the Behavioral Emotional Rating Scale-2 (Spanish or English). Students also completed the Strong Teens Knowledge Test as a measure of their knowledge of SEL program content, and students also completed a measure of acceptability and satisfaction with the program. The students in the intervention group reported higher levels of SEL knowledge and SEL resiliency after the intervention relative to their control group peers. The students' ratings of social validity of the program also indicated that they viewed it as culturally responsive and personally useful (Castro-Olivo, 2014). Such findings suggest that a comprehensive program for Hispanic college students may be helpful in bolstering promotive factors like growth mindset, self-management, and sense of belonging. This is particularly true given that research with broader at-risk populations suggests that even isolated

growth mindset, sense of belonging, or self-management interventions can impact student outcomes.

Strategies for program delivery. Such SEL programs have been found to be most effective when delivered in an atmosphere that is accepting, comfortable, and positive (Durlak et al., 2010). Small group counseling approaches have historically emphasized similar goals. The small group environment offers a multitude of benefits. First, students are offered the opportunity learn and practice skills in a safe group of peers who have similar concerns. Often youth may believe that they are the only ones who have a particular concern or difficulty, and groups offer a forum for disconfirming such a belief. Additionally, in connecting with students that they might not have otherwise met, group participants may be exposed to perspectives never before considered. As maturing adolescents, hearing ideas and similar experiences from other students is often more powerful than being told by an adult or person in a position of authority. In promoting an atmosphere that is accepting of all ideas, the group facilitator helps foster group cohesion and a sense of the universality of experiences. This helps create a climate supportive of change (Paisley & Milsom, 2007). Furthermore, the small group counseling context provides a natural opportunity for an informal mentoring relationship between the group facilitators and participants. Positive mentoring relationships in college have been shown to aid the student in navigating the university successfully as well as in bolstering skills like goal setting and problem solving (Upcraft & Gardner, 1989).

Cognitive-behavioral approaches, often used in the small group context, offer a viable method of teaching social emotional skills. Such approaches emphasize the connections between thoughts, emotions, and behaviors. Prior research has demonstrated the utility of cognitive behavioral approaches in stress management and building positive cognitive mindsets in college

populations (Regehr et al., 2013). Following “SAFE” procedures in the context of SEL programs has also been shown to lead to better student outcomes (Durlak, et. al., 2010, 2011).

The SAFE approach includes:

- Sequenced step-by-step training approach
- Active forms of learning that require practicing new skills
- Focus specific time and attention on skill development
- Explicit in defining the social and emotional skills they are attempting to promote

The SAFE approach emphasis on active learning is consistent with research indicating that college students tend to prefer active learning activities that are self-directed and immediately applicable. The self-directed learning theory holds that attainment of educational goals is increased if the student is given some control of the learning process. It is also important to consider the experiences these learners bring to the table when planning and structuring the learning environment (Ross-Gordon, 2011). Such methods can inform intervention development for Hispanic/Latino college students.

Intervention Research

Intervention research has been established as a method of guiding the development of interventions. It is based on evaluating prior research and blending relevant findings with knowledge of the implementation setting. Fraser and Galinsky (2010) define intervention research as “the systematic study of purposive change strategies” (p. 459). It involves both the design, which includes specifying practice principles, goals, and activities for the intervention, and intervention development itself. Critical to development is outlining the problem theory, which delineates the risk and promotive factors involved. It also includes identification of malleable mediators, which are those factors that appear to explain outcomes and may be

changed through intervention (Fraser, Richman, Galinsky, & Day, 2009). Program theory then guides the development of core components and treatment manuals, which are successively revised and refined through a series of studies (Blase & Fixsen, 2013; Fraser & Galinsky, 2010).

Core components are the fundamental principles of an intervention, as well as the activities to be performed that will produce the desired outcomes. The goal is to identify the components that have been shown to impact proximal outcomes, with the hope that longer-term outcomes will also be achieved. Core components are based in theory but can be operationalized to describe the necessary environmental factors, intervention practices, and structural elements. The theory of change proposes the mechanism that drives the program. The core components are often the malleable mediators, as these are the factors that the intervention hopes to control in order to affect change. In intervention research, a theory of change is also outlined to describe the mechanism that drives the program (Blase & Fixsen, 2013).

The intervention research approach aims to ensure that a program is based in well-defined core components, but also to test whether outcomes change *as a result of* these components. Identifying the key components is essential for scalability purposes, as the program can be adapted yet still be effective if practitioners have detailed guidelines about which components are essential and which can be tweaked. Currently, many interventions lack well-defined core components, even among those that are evidence based. This may be in part because research standards and journal requirements have not traditionally emphasized that components should be described in the level of detail needed for easy replication. This lack of specified “active ingredients” and procedures for fidelity makes it difficult for practitioners to implement. Thus, the well-operationalized set of core components offers a number of benefits. First, since programming resources are often scarce, they can be allocated to the components that

are known to make a difference. The program can also be more easily adapted to other contexts. Replication and implementation on a broader scale are easier, given explicitly defined program procedures and components. Additionally, the likelihood that program outcomes will be interpreted correctly is increased, as are the odds that implementers will effectively evaluate changes needed to improve their implementation. This helps increase knowledge of what processes and components are effective in a given research field (Blase & Fixsen, 2013).

Fraser and Galinsky (2010) outline five steps for intervention research. They emphasize the importance of involving key stakeholders in the particular setting in all steps, as these individuals usually have valuable context-specific knowledge. First, a problem theory is developed which outlines the risk and promotive factors for the target population. This includes developing a program theory of change and a logic model that identifies the intervention setting and agents. Secondly, researchers specify the program structure and processes, draft a treatment manual, and solicit feedback from experts. The program is piloted on a small scale with preliminary collection of outcome and fidelity data. Feasibility of implementation is equally important to outcome data at this stage. Based on the data, the intervention is modified. During phase three, efficacy testing is conducted. Researchers maintain high control of the intervention to estimate program effects. A control group is utilized and the study must be adequately powered so that the researchers may test for mediation and moderation effects. These mediation and moderation effects are used to determine guidelines for adapting the intervention to different contexts. Thus, by step four, the goal is to bring the intervention to scale by conducting effectiveness studies at multiple sites. At this point, researchers do not typically deliver the intervention and a lower level of control is maintained. The aim is to estimate intervention effect when it is implemented under more natural conditions. The fifth and last step involves

dissemination of the program, including publishing findings and developing training materials and processes (Fraser & Galinsky, 2010).

Once the core components have been identified, intervention research often makes use of the Plan-Do-Study-Act (PDSA) cycle in order to refine them and eventually scale up to other contexts. The PDSA cycle includes four steps: 1) Plan: specifically describe the steps required to move the intervention or program forward 2) Do: facilitate the implementation of the described plan, 3) Study: develop and use assessments to determine if and how the plan is working, and 4) Act: make changes to improve the next iteration of the intervention or program. This cycle allows for continuous improvement, and is particularly necessary for determining how a given intervention fits into pre-existing organizational structures and systems (Blase & Fixsen, 2013). Outcome data are important, but equal weight should be given to collecting data about implementation fidelity, as this provides information about how the quality of implementation impacts outcomes (Metz, Naoom, Halle, & Bartley, 2015).

Usability testing is an example of a PDSA cycle. It was developed to validate and refine the core components in small-scale research trials before moving on to large-scale implementation. This helps to better operationalize a program (Blasé & Fixsen, 2013). Usability testing implements a very small first trial of an intervention, assesses immediately, and begins another small trial including modifications based on results from the first trial. This cycle of improving upon the core components and active ingredients is repeated until desired proximal outcomes are achieved. For example, four cycles with four participants in each trial might be needed to reach the desired proximal outcomes (Nielsen, 2005).

The intervention research process is not necessarily linear, as a negative result at any step along the way necessitates a second examination of the program and its refinement. This allows

for it to be refined and reassessed until it reaches an acceptable threshold for efficacy. That threshold is generally reached when the intervention generates an effect size equal or greater than those of existing interventions addressing the particular need. An intervention with well-defined core components and established efficacy is ready to be adapted to a particular context or population (Fraser & Galinsky, 2010).

The intervention research process is thus key in developing programs and treatments that are both feasible and effective in a variety of settings. This method allows a program to be developed that is grounded in theory but also based specifically on the context in which the program will be delivered (Fraser & Galinsky, 2010). The current project will adhere to the intervention research approach in order to determine core components of a SEL intervention for Hispanic/Latino college students.

Summary of Relevant Literature

Given the continued lag in the numbers of Hispanic/Latino students attending and successfully graduating from American institutions of higher learning, it is critical to address the unique barriers that render these students less likely to be successful in college. Given the social and emotional challenges faced by college students, an intervention that targets SEL skills would be beneficial to not only the Hispanic/Latino population, but to college students in general. Research has established that Hispanic/Latino college students are at risk for lower academic self-confidence, decreased social connectedness, and increased demands on their self-management and coping skills. Despite these challenges, however, the literature suggests that several promotive factors are linked to positive academic and social outcomes for Hispanic/Latino college students. These SEL skills include sense of belonging, self-efficacy and growth mindset, and self-management skills for goal setting and coping with adversity.

Research also suggests that some level of bicultural identity may support student success, although research is somewhat mixed and mostly conducted at HSIs. Furthermore, it is clear that sense of belonging is the mediator between ethnic identity and college persistence, rendering it a more evidence-based target for intervention at this time (Castillo et al., 2006).

Although no college transition program has specifically included these SEL factors in conjunction, interventions with college students have demonstrated success in targeting these factors in isolation. Furthermore, SEL programming has historically demonstrated success in bolstering resiliency in younger Hispanic/Latino adolescents. Thus, the creation of a more comprehensive, skill-building SEL program grounded in theory is called for to address the unique needs of the growing Hispanic/Latino college population. The rigorous intervention research approach can be used to guide the process to ensure that funds and efforts invested in SEL programming are put to efficacious use.

CHAPTER 3: METHODOLOGY

Purpose of the Study

The goal of this investigation was to examine preliminary outcomes and feasibility of a newly developed SEL intervention for Hispanic/Latino undergraduate students. As described, determining usability and feasibility involves gathering information about the extent to which intervention stakeholders find the programming useful and feasible. Thus, data were collected on initial participant outcomes as a result of the intervention, as was information regarding feasibility of intervention implementation in the university setting.

Research question 1: What was the feasibility and usability of the SEL intervention with Hispanic/Latino students in the UNC setting? In lieu of testing a hypothesis, the investigator gathered feedback from stakeholders about the feasibility of intervention implementation *in the particular context*. More specifically, intervention participants were asked to share their level of satisfaction with the intervention content and the method of program delivery. Data collection was then used to guide the investigator to make any necessary improvements to the program curriculum and its delivery.

Research question 2: As compared to controls, did Hispanic/Latino undergraduates participating in the SEL intervention show greater gains in sense of belonging, self-management, and growth mindset? The researcher hypothesized that after participating in the intervention, Hispanic/Latino students would demonstrate greater gains in sense of belonging, self-management, and growth mindset than their peers in the control group. With the goal of

determining intervention usability in mind, confirmation of such a hypothesis would provide a preliminary indication that the intervention had the intended effect on participants.

Intervention Research Protocol

To answer the research questions, this investigation built upon a prior study that used the intervention research process to develop a prototype of the SEL intervention manual.

(Knotek, Senior, Fleming, Wright, & Fornaris, 2017). The following section first outlines the steps followed in the prior study to determine core components of the intervention and develop a curriculum prototype. Intervention research protocol dictated that the next step in intervention development was implementing the prototype intervention on a small scale to examine usability and feasibility (Fraser & Galinsky, 2010, Blase & Fixsen 2013). Thus, the latter portion of this section describes how intervention research protocol guided the current study.

Treatment feasibility and acceptability study. In order to determine intervention components and optimal delivery format, a treatment feasibility and acceptability study was first conducted. Intervention research protocol was followed (Fraser et al., 2009). Literature review was used to establish the prevalence and incidence of student populations who are at risk for academic failure in the first year of college. Prior work regarding resiliency in underserved college populations and existing SEL program structures was also examined. This literature review was used to identify malleable mediators and inform the intervention's underlying problem theory, core components, and theory of change (Appendix B). The four proposed core components were self-management, sense of belonging, growth mindset, and self-advocacy.

To assess the intervention's feasibility, scalability, and generalizability, focus groups were conducted at two universities with twenty-six racially diverse undergraduates. University staff and experts in the field of social emotional learning were also consulted for their input.

Focus group participants included undergraduate students of any level. All groups provided feedback regarding the core components, rationale, and structure of intervention delivery. Data were transcribed and coded for themes (Knotek et al., 2017).

Results supported inclusion of the four proposed core components. Students from all groups perceived sense of belonging as most important to first-year student success, but it was especially critical to the students of color (African American, Hispanic/Latino, and multiracial). Self-management was also endorsed as a key construct for these students of color, as was self-advocacy. Focus groups predominately comprised of students of color endorsed the importance of growth mindset to a greater degree than more racially and ethnically diverse focus groups. With regard to program feasibility, scalability, and generalizability, students tended to prefer a more long-term approach to developing SEL skills that included both hands-on and discussion formats. The use of technology, specifically social media tools, received mixed reviews. Some students believed that technology would distract from the overall intent of the program, while others believed that they would be less likely to participate without the inclusion of social media. Students emphasized that using peer advocates of the program would be helpful in recruiting participants. Specifics of program structure were contingent upon the university location, size and demographics. Students noted, however, that the flexibility in program structure would make it more likely for the program to be implemented. These results guided development of an intervention prototype manual, which was developed to include detailed program delivery information and sequenced sessions. The treatment feasibility and acceptability study represented the initial phase in Fraser and Galinsky's (2010) intervention research protocol (Knotek et al., 2017).

The current study. Building upon the prior work, the current study implemented the prototype intervention on a small scale to examine preliminary outcomes, usability, and feasibility. Usability testing was used to validate and refine the core components. Thus, a small-scale trial of the intervention was implemented with a group of undergraduates over a period of several weeks. The process and results was immediately assessed and followed by a second trial that made necessary modifications based on data from the first trial. This cycle of implementing, assessing, and refining continued for three iterations, with the goal of successively improving the intervention program (Fraser et al., 2009; Nielsen, 2005). In clarifying the core intervention components and key delivery processes, the idea was to better operationalize the program for future implementation (Blase & Fixsen, 2013).

Design

This study utilized a mixed methods design to answer the research questions. A concurrent triangulation approach was used to confirm and cross-validate findings, with the goal of strengthening the findings through both quantitative and qualitative data components. The data were collected and analyzed concurrently. Quantitative data were collected to determine preliminary outcomes, whereas both quantitative and qualitative data were collected to determine feasibility and usability of the intervention in the university context. Both types of data were given equal priority in answering the feasibility and usability research question, and the data were integrated at data collection and at data analysis. A graphic of the research design can be viewed in Figure 5.

Research Question 1. In order to gather information about the feasibility and usability of the intervention, qualitative and quantitative data were collected post-intervention. Following the conclusion of each small trial of the program (four sessions), qualitative and quantitative data

were solicited from participants in the treatment group to address their initial perceptions of program utility and feasibility. These data were utilized to determine perceptions of the group content and format and make adjustments to improve the next iteration of program implementation.

Research Question 2: In order to determine initial outcomes of the SEL intervention, the researcher implemented a two-group pretest posttest design. Participants were randomized to either a treatment or control condition, with data collection occurring pre-intervention and post-intervention. The independent variable had two levels: treatment or control group. The dependent variables were the participants' change in performance on three SEL skills: sense of belonging, self-management, and growth mindset. Change in performance was measured by subtracting each participant's pretest score from his or her posttest score. Based on a review of literature, the following variables were identified as covariates: SES, first generation status, generation of family which first immigrated to the U.S., high school GPA, and current job status. These covariates are all discrete variables.

Ethical Considerations

This investigation was conducted with approval of the Institutional Review Board (IRB #16-1767) at the University of North Carolina at Chapel Hill. Participant identity and information was kept confidential and secure in order to preserve confidentiality and meet the sponsoring university's IRB requirements. Individual names were de-identified using alphanumeric codes. Procedures for obtaining informed consent are detailed later in this chapter.

Sampling

The target sample was drawn from the undergraduate population at the University of North Carolina at Chapel Hill (UNC-CH), a predominantly white research institution in the

southeast United States. The intervention program was held on the UNC-CH campus to maximize group accessibility and foster community. In fall 2015, the university's undergraduate population consisted of 18,415 students. Of these students, 7.7% were Hispanic/Latino, 8.2% were African American, 11.7% were Asian, and 63.7% were white. 58.2% of undergraduate students were female and 41.8% were male (University of North Carolina at Chapel Hill, 2015).

The UNC-CH context is unique with regard to student success. In comparison with many other public four-year institutions, student retention and graduation rates are considerably higher at UNC-CH. Comparable to other highly competitive public institutions, UNC-CH has consistently retained over 90% of students from freshman to sophomore year over the past ten years. Data from the 2010 cohort show that 97.2% persisted from first to second year, 94.1% to third year, and 90.9% to fourth year. 84.1% had graduated after four years and 91.4% had graduated after six years (UNC Office of Institutional Research and Assessment, 2016). Of the students who do leave the university, many but not all cited reasons such as difficulty adjusting to changes from their home life to the college demands, feeling overwhelmed and depressed, or feeling uncomfortable as an out-of-state student. Many other students, however, reported leaving because they wanted to pursue a major not offered at UNC or wanted to live closer to home (UNC Retention Task Force, 2010-2011). This student commitment to remaining at UNC-CH may be due in part to the high numbers of North Carolinians who matriculate to the university and have been raised to be "Tar Heels". Despite exceptionally strong university commitment and high retention and graduation rates, similar to other institutions, UNC-CH students still report feeling overwhelmed, lonely, sad, and anxious at fairly high rates (American College Health Association, 2013). Like many other postsecondary institutions, UNC-CH defines student success as encompassing such emotional aspects of the college experience. The

five components outlined by the university involve intellectual exploration and growth, appreciation of diverse perspectives and identity development, social and emotional skill development, engagement in meaningful relationships and roles, and cultivation of a sense of purpose (UNC-CH Office of Undergraduate Retention, 2016). Thus this program was implemented within a school culture that has been increasingly embracing the role of social and emotional skill development in overall college success.

In understanding the UNC context, it is also noteworthy that several existing programs cater to the needs of the Hispanic/Latino community. The Carolina Hispanic Association (CHispA) is the largest Hispanic/Latino organization at UNC. The organization touts goals of encouraging awareness of Hispanic/Latino issues, promoting cultural affairs and events, and fostering a community where all students interested in such goals are welcome. CHispA offers opportunities for community involvement such as large social events, game nights, cooking classes, a Latin dance group and radio station, intramural sports, and service opportunities (Carolina Hispanic Association, 2017). The Carolina Latinx Collaborative (CLC) is an organization dedicated to increasing awareness of Hispanic/Latino issues by collaborating across the UNC campus. In conjunction with the Latino Studies Department, the CLC runs *La Casa*, a Spanish-speaking residence for students of any background who have an interest in Latinx culture and study. The CLC facilitates a mentoring program, pairing freshmen with other Hispanic/Latino students, as well as events such as Latinx Heritage Month and a Latinx Alumni Reunion (Carolina Latinx Collaborative, 2017). Lastly, N.C. Scholar's Latino Initiative (N.C. SLI) has three programs. UNC students may mentor a Hispanic/Latino high school student on topics of personal and professional development and the college application process. SLI also provides a network for UNC students to connect with a professional mentor in their field of

interest to provide them with career advice and help them track career goals. SLI's third program works for families of first-generation college students to help them support their student throughout the college process. (UNC Center for Global Initiatives, 2016).

Participant Recruitment and Group Assignment. Participants were recruited primarily through the establishment of connections and collaborative efforts with relevant UNC Hispanic/Latino organizations, such as the CHispA and the CLC. Based on these connections, information was shared by (a) posting flyers in residential halls and academic buildings (b) by providing Hispanic/Latino organization leadership with flyers to distribute, and (c) attending Hispanic/Latino organization events and speaking about the program. A sample flyer is located in Appendix C.

Interested students were informed of the goals and expectations of the project, as well as the procedures involved. Informed consent (Appendix D) from all participants was required. Students were assured that participation was voluntary and that they could withdraw at any time. Students were also prompted to indicate whether or not to receive email or text reminders of the program sessions each week. Participants gave informed consent with the understanding that they might be assigned to either condition of the study. They were then randomly assigned to either the treatment or control condition. Participants were assigned a number and an internet-based pseudo-number generator, Research Randomizer, was used to randomly assign students to the treatment or control group (Urbaniak & Plous, 2013).

After randomizing participants to groups, the students completed the Demographic Survey (Appendix E) using the Qualtrics online survey platform. This served to provide information about students and ensure that all students met the study criteria, which they had been informed of upon signing consent. Students were required to be Hispanic/Latino freshmen

or sophomores between ages 18 and 22 in order to participate in the study. Consistent with the U.S. census, students were determined to meet the Hispanic/Latino criterion based on self-identification as such. No other exclusion criteria were employed. All participating students were also informed that there was a possibility they would be invited for a voluntary follow-up interview at the end of the four-week program. The invited students were purposefully chosen through examination of student responses on the initial demographic survey. These six students were selected as “exemplars” with differing background characteristics, with the goal of gaining the perspective of Hispanic/Latino students who hail from different life circumstances.

The Resulting Sample. During the first and third iterations of the program, a few students dropped out of the study after random assignment but before completing the demographic survey. The number of students who initially gave consent to participate in the study and those who ultimately participated are shown in Table 3. For example, during the first program iteration, nine students were randomly assigned to the treatment condition and ten to the control condition. One student assigned to the treatment group dropped out, resulting in eight students in the first iteration treatment group. Overall, three participants dropped out of the treatment condition and one out of the control condition. Resulting total sample size included 51 participants, 23 in the treatment condition and 28 in the control. All 23 students in the treatment condition attended all four of the program sessions.

Table 3

Random Assignment of Participants to Condition, by Iteration

Program Iteration	Treatment <i>n</i>	Control <i>n</i>	Total <i>N</i>
1	8 (9) ¹	10	18 (1)
2	6	7	13
3	9 (11)	11 (12)	20 (3)
Total Participants	23 (26)	28 (29)	51 (55)
Drop out	3	1	4

¹ Each cell shows the number of students that participated in the group, sometimes followed by a number in parentheses indicating how many students were initially randomly assigned to the group before students dropped out of the study.

The resulting 51 participants were full time students at the University of North Carolina at Chapel Hill, self-identified as Hispanic/Latino, and were between the ages of 18 and 21 ($M = 18.57$ years, $SD = .67$). 78.4% of participants were female and 21.6% male. 56.9% were first year college students and 43.1% second year college students. 72.5% were born in the United States, whereas 9.8% were born in Colombia, 3.9% were born in Mexico, and 14% were born in other Latin American countries. Only 15.7% of participants had parents who were also born in the United States. 33.8% had parents born in Mexico, 11.8% had parents born in Colombia, and 39.2% had parents born in other Latin American countries. 84.3% of participants were fluent in English and Spanish and 13.7% were fluent only in English. 56.9% were first generation college students in that neither parent had attended a four-year college or university. 78.4% reported receiving need-based financial aid to attend college. 37.3% had held a job at some point during college. Average high school GPA was 4.32 and students had acquired an average of 31.31 credits upon starting the study. Table 5 shows demographic information. Further demographic data is outlined in Table 6 in Appendix A.

Table 5

Demographics of the Sample: Frequency Data

Demographic Variable		Treatment		Control		Total	
		<i>n</i> =23	%	<i>n</i> =28	%	<i>N</i> =51	%
Gender	Male	6	26.09	5	17.86	11	21.6
	Female	17	73.91	23	82.14	40	78.4
Year in college	First	11	47.82	18	64.29	29	56.9
	Second	12	52.17	10	35.71	22	43.1
Parent Place of Birth	U.S.	3	13.04	5	17.86	8	15.7
	Colombia	5	21.74	1	3.58	6	11.8
	Mexico	11	47.83	6	21.43	17	33.3
	Guatemala	1	4.35	3	10.71	4	7.8
	Other ²	3	13.04	13	46.43	16	31.4
Born in the U.S.		18	78.26	19	67.86	37	72.55
Bilingual ³		20	86.96	24	85.71	44	86.27
Held a job in college		7	30.43	12	42.86	19	37.3
First generation ⁴ college student		16	69.57	13	46.43	29	56.9
Receiving need-based financial assistance		18	78.26	22	78.57	40	78.4

²Other countries included: Nicaragua, Panama, Venezuela, El Salvador, Peru, Ecuador, Honduras, Costa Rica, Dominican Republic, Puerto Rico, and Brazil.

³Bilingual students spoke Spanish and English with the exception of one individual who spoke English, French, and Portuguese. Monolingual students spoke only English.

⁴A first generation student was defined as an individual whose parents did not complete a four-year college or university degree.

Purposive sampling was used to select six exemplar students to participate in one-on-one interviews, three students from both the control and treatment conditions. The goal of choosing these six was to represent the diversity of the sample and recognize the diversity of the Hispanic/Latino population as a whole, as students who self-identify as Hispanic/Latino may differ greatly from one another on demographic characteristics outside of ethnicity. Given these differences, the goal of the interviews was to see if any differences emerged between the perspectives of these students, but mostly to see what the commonalities were in their descriptions of the college experience. The following six students were thus chosen to represent

differences in demographic variables such as socioeconomic status, parent level of education, generations in the United States, number of languages spoken, and first generation college student status. All of these students are referred to with pseudonyms through this paper. Two students, “Benita” and “Rodrigo”, immigrated to the United States as children and were first generation college students receiving financial aid. Two other students, “Hayley” and “Alba”, self-identified as both white and Hispanic and were not receiving financial aid. Hayley did not speak Spanish and was a first generation college student, whereas student Alba spoke Spanish and had parents with a college degree. The last two students, “Ramon” and “Margarita”, were children of parents holding graduate degrees and were native Spanish-speakers not receiving financial aid. Margarita was an international student, whereas Ramon had been born in the United States. Overall, half of the interviewees were first generation college students and the other half were students whose parents held college or graduate degrees.

Measures

Three surveys were used to collect information from participants. The demographic survey, SEL questionnaire (Questionnaire A), and feasibility questionnaire (Questionnaire B) are shown in their entirety in Appendix E. All three of these measures were entered into the Qualtrics software and students completed them online. The interview questions utilized in the six in-depth interviews are also shown in Appendix E.

Demographic Survey. The Demographic Survey consisted of a set of questions for student participants and was used to gather background information. Initial questions prompted students to provide their age, year in college, gender, and race. Students were also asked to identify whether they were bilingual, state if they have held a job while in college, provide estimates of family SES and parental level of education, and identify how many generations their

family has lived in the United States. These demographic data were chosen based on existing research demonstrating that these factors may influence college success. Furthermore, students were asked to list other services or programs in which they were participating at the time of data collection so that other possible contributors to any change in performance on the SEL measures could be considered.

SEL Questionnaire. An SEL questionnaire, called Questionnaire A, was created to include three subsections: Growth Mindset, Sense of Belonging, and Self-Management. Across sections, respondents rated the extent to which they agreed or disagreed on a 6-point Likert scale: *strongly disagree* (1), *disagree* (2), *mostly disagree* (3), *mostly agree* (4), *agree* (5), and *strongly agree* (6). Ratings resulted in a single interpreted score for each subsection. Negatively worded responses were reverse coded. Higher scores reflected a tendency toward a growth mindset orientation, a greater sense of belonging, and/or more developed self-management skills.

The Growth Mindset questionnaire items were drawn from Carol Dweck's (1999) Mindset scale. The questionnaire prompted students to identify the extent to which they believe intelligence is malleable and assessed their approach to learning new skills. Cronbach's alpha for the Mindset scale has been reported to be high in other investigations ($\alpha = .94-.98$, Dweck et al. 1995; $\alpha = .89$, Furnham 2014). The Sense of Belonging questionnaire items were adapted from the social scale of Walton and Cohen's (2007) Sense of Social and Academic Fit scale. In prior studies, internal consistency for the Sense of Social and Academic Fit scale has been found to be high ($\alpha = .76$, Cook et al., 2011). The resulting scale asked students to assess the extent to which they felt they belonged at their university. This included both feeling supported by the university community and a sense that there are other students with similar values and interests to theirs. The Self-Management questionnaire items were drawn from Button, Mathieu, and Zajac's

(1996) 8-item Learning Goal Orientation scale, as well as the five-item version of the Goal Commitment Questionnaire (Hollenbeck, Williams, and Klein, 1989). Cronbach's alpha for Button et al.'s (1996) Learning Goal Orientation scale has also been reported to be high in prior studies ($\alpha = .79-.85$, Button et al., 1996). Based on factor analysis, the five-item Goal Commitment scale was determined to produce better one-dimensional fit than the nine-item version. This version of the Goal Commitment Questionnaire has an α reliability of .74 (Klein, Wesson, Hollenbeck, Wright, & DeShon, 2001). The resulting self-management scale measured goal mastery orientation and goal commitment. For all three SEL scales, responses were averaged to calculate a summary score for each participant on that scale.

Feasibility Questionnaire. Consistent with intervention research, data collection placed equal weight on feasibility and fidelity measures (Fraser & Galinsky, 2010; Blasé & Fixsen, 2013). Students completed questionnaires asking for their feedback about the program across three domains: outcomes, content and delivery. Outcome questions prompted students to assess whether they believed they learned from the program and found it helpful. Content questions required students to assess their perceptions of the content included in the sessions, whereas delivery items prompted for perceptions of variables like timing, location, facilitator characteristics, and types of activities. Across sections, respondents rated the extent to which they agreed or disagreed on a 4-point Likert scale: *strongly disagree* (1), *somewhat disagree* (2), *somewhat agree* (3), and *strongly agree* (4). Following the Likert-scale items, participants responded to six open ended questions that also addressed perceptions of program content and delivery.

Select Intensive Interviews. Three participants from the control group and three participants from the treatment group participated in a one-on-one interview with the researcher

that lasted 40 to 60 minutes. The interview included questions presented to both control and treatment group, which prompted participants to discuss their experience with college and the social and emotional qualities they believe help college students be successful. Those in the treatment group also answered questions regarding their perceptions of the SEL program and its utility, whereas those in the control group answered questions regarding how supported they have felt in acquiring social and emotional learning skills in college.

Procedures

Treatment Condition. Students assigned to the treatment condition participated in face-to-face small group sessions featuring an SEL curriculum. Between six and ten students participated in each group and attended a weekly sequence of four core sessions. All student participants attended all of the four intervention sessions. The 50-minute sessions were held once per week at the same time. Prior to each week's session, students who elected to receive a reminder text or email were contacted.

The investigator, a school psychology doctoral student, was trained on the program curriculum as well as broader SEL principles and small group counseling principles. In order to maintain high control of the program during this phase of the intervention research process, the researcher facilitated the groups. In order to ensure fidelity to the intervention, this researcher met with her supervisor at least monthly during the intervention to discuss implementation fidelity. The facilitator worked to create a supportive environment in which students would feel comfortable sharing their ideas with peers.

The program curriculum included four core sessions, delivered over four consecutive weeks. Sessions included a mix of teaching formats, such as individual self-reflection, group discussion, work in pairs, and hands on activities. The lesson plans for each session are shown in

Appendix F. The first session was designed to build rapport amongst group members and bolster sense of belonging. It emphasized the idea that social adversity at the start of college is a shared, normal experience for all college students. In session two, students explored growth mindset through activities and discussion about the malleability of intelligence. In session three, the group members engaged in a self-management activity designed to promote specific articulation of future goals and the steps required to achieve them (Knotek, Fornaris, Wright, & Fitzpatrick-Fleming, 2015).

Session four, which was a supplemental session in the originally developed prototype, was added specifically to the core curriculum to meet the needs of Hispanic/Latino students. Based on the review of literature, the values affirmation activity addressed sense of belonging difficulties often faced by the Hispanic/Latino population that appear rooted in the sense that others at their university do not share their values. This activity worked to affirm the importance of the students' values and thus buffer them from perceptions that their values are not perceived as worthwhile at this university. Given that all group members shared the Hispanic/Latino culture, the session also provided a forum for discussion of cultural values and aimed to provide the opportunity for students to see that others hold similar values, but also that even within cultures there may be individual differences in values (Knotek et al., 2015).

Students in the treatment condition completed the demographic survey and pretest SEL questionnaire prior to the start of the first session. They completed the posttest SEL questionnaire and feasibility survey following the fourth session of the program. Immediately following the completion of the posttest questionnaires, three students from the treatment condition were selected to participate in a one-on-one interview with the researcher to gather

further information about their experience with social and emotional learning in college and their perceptions of the program.

Control Condition. Students randomly assigned to the control group did not participate in the intervention. They completed the demographic survey and pretest SEL questionnaire at the same time as those in the treatment group. They completed the posttest SEL questionnaire at the end of four weeks, at the same time that treatment group participants completed the posttest. Immediately following this, three students from the control condition were selected to participate in a one-on-one interview with the researcher to gather further information about their experience with social and emotional learning in college.

After the completion of the posttest surveys and interviews, control group participants were provided access to the intervention materials in the form of a PDF document posted on a Sakai site that they were invited to join. This included content from the core sessions, such as self-exploration activities and materials that served as the basis for discussion in the treatment condition. For example, for the social connectedness session (session 1), students in the control condition were provided access to the narrative promoting the idea that initial social adversity in college is shared and short-lived. Unlike the treatment group, however, these students did not participate in the discussions or hands-on activities related to such content. It was made clear to the students that reviewing the PDF document was entirely voluntary and the researcher did not follow up with them.

Data Analysis

Analysis followed a mixed methods concurrent triangulation approach, as the quantitative and qualitative information collected was paired and compared to strengthen the findings of the study. Quantitative data were analyzed using SPSS statistics and qualitative data were analyzed

using *Nvivo* software. The method of analysis is outlined in this section and a graphic of the process used can be viewed in Table 4 in Appendix A.

Feasibility and Usability. At the end of each trial of the program, the participants' Likert scale ratings of feasibility and usability were analyzed and frequencies of ratings calculated. Any areas with predominantly negative ratings (1-2) were targeted as areas for possible modifications in the following trial of the program. Qualitative responses to open-ended questions on the feasibility questionnaire were first read several times by the researcher in order to identify any emergent themes. Based on this initial reading, a preliminary set of codes was created and the responses were read again and coded accordingly. Comments including multiple topics were coded into multiple categories. A second round of coding then occurred in order to identify and code sub-themes. The responses were analyzed and organized to determine themes and patterns. The qualitative codebook with definitions of codes is shown in Appendix G, and the codebook notes which codes were developed based on the literature review and which were identified through response analysis. These data were largely used for descriptive purposes, aiding in the interpretation of ratings on the feasibility scale and offering solutions for remedying any problems. Frequencies of certain themes were also noted.

Based on the qualitative analyses following each iteration of the program, tweaks to program curriculum and delivery were made, although no significant changes were made given that none of the survey feedback was predominantly negative. Because of this, changes between each of the three iterations were minor and revolved around modifying activity directions or worksheets for clarity, rather than changing content. For example, after the first iteration, the introduction to the program was laid out more clearly in the manual, clarifying what the facilitator should tell participants about how the program would unfold and what each session

would cover. This introduction was generated based on questions that students in the first iteration had asked about the program. Following this change, participants in the second and third program iterations appeared to have a greater understanding of what to expect at each session. Another example of a practical change made was a change to the discussion questions during the growth mindset session. Based on the discussions that students had during iterations one and two, the program facilitator was able to add possible questions for further discussion to the list of questions in the manual. This was helpful during iteration three of the program, when several of the students were less talkative and more prompting from the facilitator was needed to structure the discussion. As a result of such changes, the manual became more comprehensively guiding for future facilitators, but the content or basic structure of the activities did not change.

The interviews with the six selected exemplar participants were audiotaped and transcribed verbatim. The next step was to clean and organize the data files. In order to enhance familiarity with the data and obtain a more complete understanding of the student perspective, the researcher read the transcripts several times and paired them with the quantitative feasibility data. Both deductive and inductive approaches were used in coding the interviews for themes, which was done using Nvivo software (Mauskopf & Hirsch, 2016). This re-reading of the transcripts allowed the researcher to first identify any emergent themes that may not have been expected. Deductive coding was then used with a priori codes developed based on the SEL intervention theory and core components. These were the same set of a priori codes used for the open-ended responses on the feasibility questionnaires. For example, broad content codes included “self-management”, “growth mindset”, and “sense of belonging”. Examples of broad codes related to program delivery included “participation motivators” and “facilitator role”. These codes, shown in Appendix G, were operationalized to ensure consistency in coding.

Based on a review of the responses falling under the broad categories, further coding was utilized to identify subthemes that emerged within the categories. In order to determine which codes were most salient, two methods were triangulated. First, the number of times the theme or subtheme was coded overall was assessed. Secondly, the number of different participants who cited that particular theme was assessed, in order to ensure that a theme would be based on more than one individual's perspective. Once coding was analyzed for themes and patterns, the researcher utilized member-checking, verifying with students that the interpretation of their responses truly reflected their experiences and intended meaning behind their statements.

This qualitative data analysis was completed by the researcher, who has been trained in qualitative analysis through graduate level qualitative coursework and prior experience as a research assistant on a qualitative research project. In order to promote validity, a second coder was provided with the finalized codes and asked to independently code both the responses to the open-ended survey questions and the six student interviews. This coder was a graduate student with a level of training in qualitative research similar to that of the researcher. The researcher and second coder compared coding and discussed any discrepancies in coding, coming to consensus on how the discrepant portions of text should be categorized and interpreted. This process and the member checking conducted with student interviews helped ensure validity of analysis.

Once all of the coding was complete and verified, the analysis for themes occurred across both the feasibility questionnaire and the individual interviews, with the goal of providing an overarching description of student perception of the program content and delivery. This means that themes were determined by analyzing the responses of six different interviewees, as well as the open-ended responses to the feasibility questionnaire for the 23 treatment condition

participants. Thus, overall, the qualitative analysis was based on data from 26 different individuals, given that 23 completed the feasibility questionnaire (three of these students also did individual interviews) and 3 control group participants who completed individual interviews.

Initial Outcomes. The sample of 51 participants was first analyzed to determine whether the participants in the treatment and control groups differed significantly on any of the demographic variables deemed covariates as a result of the literature review (SES, first generation status, generation of family which first immigrated to the U.S., high school GPA, and current job status). To achieve this goal, descriptive statistics and frequencies were calculated. Given that the four students who dropped out prior to pre-test measures did not provide any data, including demographic information, they were not included in analyses. Complete demographic data (means, standard deviations, frequencies) can be found in Tables 5 and 6 in Appendix A. Pearson chi-square and Fisher's tests of independence were conducted to determine whether the treatment and control groups differed significantly on any of the demographic variables. The groups did not differ significantly on any demographic variables, with the exception of students reporting having parents born in Mexico. Tables 6 and 7 in Appendix A provide complete demographic comparison data using chi-square tests of independence for dichotomous demographic variables and t-tests of independence for continuous demographic data.

Participants were also asked to identify any other university services they planned to use that semester, in order to ensure that differential participation in another service across treatment and control groups would not influence change in SEL skills from pretest to posttest. Students in the control and treatment group did not report statistically significant differences in organization use, with the exception of the Carolina Latino Collaborative (CLC). In this case, more students in the control group reported that they would use the CLC that semester than students in the

treatment group. Table 8 in Appendix A provides frequency data and tests of independence for services that students indicated they would use concurrent to the study. Of note, no more than one student in each condition endorsed using the Office of the Dean of Students, Office of Sorority & Fraternity Life, Sonja Haynes Stone Center, LGBTQ Center, Office of Equal Opportunity and Compliance, and the Office of Undergraduate Retention.

The following analysis plan was carried out to compare the treatment and control group outcomes. First, for each participant, responses to the six point Likert-scale items on each of the three SEL scales were averaged at pre- and posttest to create summary scores called Average Pretest and Average Posttest. This involved averaging thirteen self-management item responses, averaging three growth mindset item responses, and averaging nine sense of belonging item responses. The result was three Average Pretest and three Average Posttest scores for each participant, one for each of the three dependent variables at both pre and posttest. An Average Change score was also calculated for each participant by subtracting his or her Average Pretest score from his or her Average Posttest score. A two-way repeated measures analysis of variance was conducted to evaluate the effect of intervention condition and time on each of the three SEL dependent variables. Intervention condition had two levels, treatment and control, and time had two levels, pretest and posttest. The *F*-test of significance was used to assess effects. An *F* value greater than one indicated that more variation occurs between groups than within groups. Following any significant results, pairwise comparisons were made to determine differences in the treatment and control group at each time point. It was important to determine that the two groups were not significantly different on the dependent variables at pretest, given that the dropout rate was higher in the treatment group ($n=3$) than the control group ($n=1$). This process allowed the researcher to test the hypothesis that the treatment group would show greater

gains on the three dependent variables than the control group. Lastly, the treatment and control group differences in Mexican heritage and use of the CLC were addressed in order to determine if these demographic variables influenced differences in SEL change between the treatment and control groups. Regressions were thus conducted to determine if participation in the control group predicted change in SEL variables when CLC use or Mexican heritage were entered into the model.

The Investigator

The investigator placed herself within the research acknowledging the ways in which her interpretation was influenced by her experiences and background. This investigator, who was raised by a Cuban father and Caucasian mother, recognized that her identity as part Hispanic/Latino is one factor that may have influenced her perceptions of the investigation. She was raised in a predominantly English-speaking household in central Virginia, an area where few other Hispanic/Latino families resided at the time. She spoke Spanish as a very young child due to close ties with extended Cuban family and then lost most of her capabilities as the family began to speak predominantly English. Based on interest and a desire to better identify with her Cuban family and the culture, this investigator fully re-learned Spanish throughout schooling, study abroad, and local volunteer experiences. Professionally, this investigator has for some time been invested in work with the Hispanic/Latino population, as she worked as a public school psychologist for four years, choosing to work in schools with a predominantly Hispanic/Latino student body. As a result of her background and experiences, this researcher identifies with and embraces many aspects of Hispanic/Latino culture but has not led most of her life immersed in that culture, and others do not typically readily perceive this investigator's ties to the Hispanic/Latino community upon first meeting. Thus, the investigator took close notice of

how her background and experiences influenced her interactions with those participating in the research study, as well as her interpretation of data collected.

The researcher utilized several techniques to promote trustworthiness during all phases of the research project. First, she kept a notebook in which she reflected throughout the process on her own subjectivity. As mentioned, a second graduate student also assisted with data analysis to ensure accurate categorization of themes and interpretation of student perspectives. This researcher also engaged in member checking with the students who participated in in-depth interviewing, ensuring that the student felt their words were accurately represented. The multiple methods of data collection employed also assisted in promoting trustworthiness. The interpretation of the qualitative and quantitative data in conjunction aided in painting a comprehensive picture of the student perspective of their college experience and participation in this SEL program. Patterns common to both methods of data collection lent strength to the believability of the interpretation.

Reflecting up on her role as both the researcher and facilitator of the program, the researcher noted several points of interest. First, given her cultural and linguistic background, the research found herself feeling similar to the students who did not speak Spanish and expressed struggles with straddling their Hispanic/Latino identity and the perception of others that they do not “look” Hispanic. The researcher recognized this in the first group and made efforts to ensure that she did not favor the students to whom she felt similar, remaining conscious of this fact throughout all the program sessions. She noted this in her notebook as a reminder that she could reference at the start of each program session. When such topics arose for discussion in the program sessions, the research made an effort to contribute to the discussion in a fashion similar to that which she would adopt for discussion of any other topic. That is, she

shared briefly her experience where relevant but allowed the students to take the lead in directing the conversation. It is the researcher's opinion that this strategy of self-awareness was effective. Also of note, the researcher took care to be self-aware when conducting the one-on-one interviews with participants. That is, she recognized that for the students meeting with her, their group facilitator with whom they had developed a relationship, might influence their responses to her interview questions. Thus, she took care to examine her interview questions prior to the interview, making sure they were not leading the student to provide favorable responses about the program. She took care to stick to the wording of these questions, as well as to prompt the student to be as honest as possible about the program so as to improve it for future students. These methods appear to have been successful, as interview feedback was similar to the anonymous program feedback provided through the surveys.

CHAPTER 4: RESULTS

The purpose of the study was to investigate the feasibility and preliminary outcomes of an SEL intervention program for Hispanic/Latino undergraduate students. Qualitative and quantitative data were collected to describe the extent to which students found the programming useful and feasible, and quantitative data were collected to analyze initial participant outcomes as a result of the intervention.

Feasibility and Acceptability

In lieu of testing a hypothesis to determine feasibility and usability of the intervention with Hispanic/Latino students, the researcher gathered feedback from stakeholders regarding intervention implementation in the UNC context. Student participants shared their level of satisfaction with the intervention content and method of program delivery, providing qualitative feedback and Likert scale responses yielding frequency data. In triangulating frequency data and qualitative responses, the goal of analysis was to guide improvements to program curriculum and implementation. Therefore, the paragraphs that follow integrate the frequency data from Likert-scale items on the feasibility questionnaire with participants' qualitative responses. Pairing frequencies with relevant explanatory comments from the qualitative data helped to place the frequency data in context. Of note, the themes described in the following paragraphs emerged based on *both* the qualitative data derived from the 23 students who responded to the feasibility questionnaire items *and* data derived from the six interviews. Since three of the interviewees

also completed the feasibility questionnaire, the following data was generated from 26 different participants. In citing the individual interviews, participants are identified with pseudonyms.

Analysis of frequency data derived from posttest survey items indicated a positive overall perception of the SEL program by participants. Table 9 in Appendix A shows the means and standard deviations of the survey question responses regarding overall program outcomes, as well as the frequency of responses on yes/no or multiple choice questions. 100% of students indicated that they would recommend the program to freshmen. Means for all 4-point Likert scale survey questions were between 3 (“*somewhat agree*”) and 4 (“*strongly agree*”). Of the treatment group participants, 91.3% responded that they “strongly agree” with the Likert-scale statement, “I am happy I participated in this program”, 82.6% responded that they “somewhat” or “strongly agree” with “I learned new skills from the program”, and 87% with “My participation in this program will help me be a more successful college student”. Within the treatment group, 86.9% “somewhat” or “strongly agreed” with, “As a result of this program, I feel more supported by others at my university”. All students indicated that the program content was relevant to their lives” and that “the skills discussed in the sessions are important for college students to have”. Qualitative responses supported the positive overall nature of the close-ended survey responses. When treatment group participants were asked to choose a least helpful program session on the feasibility questionnaire, 9 of the 23 treatment group participants wrote that they could not identify a least helpful session. Examples of responses to this prompt included, “They were all pretty helpful and relevant to life at campus.” and “The program was pretty helpful as it is. I like the content overall.” One student commented on the feasibility questionnaire, “The interaction was great and I wish that the group was still going on”. In his interview, Ramon elaborated:

I really enjoyed that program. It was a small setting but I was able to meet others that I wouldn't have met on campus. (I liked) just talking about goal setting and meeting other people from your culture and seeing that they're at a prestigious university and trying to figure out how to navigate through together and seeing what goals they're going to set. It was a good experience. I've probably formed lifetime friendships as well.

Such responses support the overall positive perception of the program. The sections that follow elaborate on specifics of content and delivery that contributed to this overall perception, in terms of themes and frequency data. An overview of these major themes and subthemes, analyzed across feasibility questionnaire responses and individual interviews, is shown in Table 10.

Table 10

SEL Program Feasibility and Acceptability: Themes and Subthemes

Aspects of Feasibility & Acceptability	Themes	Subthemes	Count	% of overall codes (*% that subtheme accounts for within overarching code)
Program Content	Sense of Belonging		85	56.3
		Social Emotional Support	26	30.6*
		Hispanic/Latino Support	29	34.1*
		Academic Support	15	17.7*
		Social Initiative	14	16.5*
	Self-Management		42	27.8
		Time Management	17	40.5*
		Stress Management	11	26.2*
	Growth Mindset		18	11.9
		Perseverance	14	77.8*
			Count	Of comments on this topic, % that emphasized this point
Program Delivery	Small group size (topic = group size)		11	78.6
	More program sessions (topic = program length)		12	85.7
	Food Incentive (topic = participation motivators)		11	47.8

Sense of belonging. In analyzing program content that students found to be important and relevant to success at UNC, sense of belonging emerged as the most salient theme. Sense of

belonging was coded a total of 85 times across the 23 feasibility questionnaire responses and six student interviews. This included responses that referenced sense of belonging as important to college success, responses that emphasized sense of belonging as a benefit of the SEL program, and suggestions for program improvement that involved sense of belonging. Sense of belonging was defined as the experience of personal involvement in an environment and a feeling that the individual is an integral part of that environment. In the college setting, this includes a sense of fellowship with peers and teachers. Within the overall sense of belonging theme, four subthemes also emerged as contributors to the understanding of content that is relevant to student success. Of these four subthemes, social emotional support comprised 30.6% of the sense of belonging codes, Hispanic/Latino support comprised 34.1%, academic support comprised 17.7%, and social initiative comprised 16.5%.

Social initiative emerged as important for college success, although it was least salient of the four sense of belonging subthemes. It was coded 14 times across the feasibility questionnaire responses and the interviews. Of the 26 individuals who provided data either through questionnaire or interview, 11 of them mentioned social initiative. Social initiative was defined as taking the initiative to meet others and being open to trying new activities and meeting new people. Several students described how effort was necessary in order to make friends. Benita explained, “You get what you put in. The first semester I talked to some students but wasn’t really as involved until the second semester. Once you put yourself out there, you make a lot of connections and friendships.” Margarita echoed this sentiment, describing the courage needed to take on this task, “You have to be courageous. It’s a new environment. For a lot of people it’s hard to stretch out of their comfort zone and you need to have the courage to try

different things and walk up to different people.” Alba described how the need for social initiative surprised her when she began college:

I guess I expected a new beginning and to make a ton of friends and so many opportunities, but you have to get involved. You have to get out there and get involved and it’s not like people are just going to come to you. I kind of expected people to come to me to make friends, so that was different.

This need for social initiative also extends to meeting professors, as students expressed the importance of approaching their professors or teaching assistants. They reinforced the idea that it is up to the college student to make the effort to get to know professors, as large college classes do not automatically yield a relationship with the professor in the way that smaller high school classes held over the course of a full academic year might have. Rodrigo described the difficulties many students have with approaching professors, “Just to reach out...some students I know don’t like to go speak to their professors, but once they ask it’s really helpful.” Similarly, Alba commented on the task of overcoming the fear that might stop a student from reaching out to make these connections:

I guess to put myself out there and not be afraid to question, because you’re going to be talking to all these people you’ve never talked to before, and like professors and people who have doctorates and seem so above your level and being comfortable with that and not letting fear hinder you in any way, because you ultimately need these relationships.

Overall, students emphasized the need for moving past feeling intimidated by peers or professors, as developing those relationships was described as crucial to social and academic success. Of note, social initiative was coded under the sense of belonging theme because it was almost always mentioned as a skill that is needed to derive some form of sense of belonging. For example, students stated that it was important to have the courage to approach professors *because they needed to have that academic support network to be successful*. Responses such as this one were coded for both social initiative and academic support.

Related to the need for students to take social initiative to reach out to professors, an overlapping theme was that of students being most successful when they are academically supported. The “academic support” theme was coded 15 times across the feasibility questionnaire responses and interviews, and 12 of the 26 individuals who provided these responses mentioned academic support as a key ingredient to college success. Academic support was defined as an individual’s perception the he or she has resources and individuals that are willing to assist with academic challenges, including peers and/or teachers. Again, Hispanic/Latino students’ comments reflected the need to find academic supports in both their peers and their professors. Margarita emphasized the importance of leaning on others to help with problem solving academic difficulties. She stated:

That’s why you need to just sit down and figure it out yourself or seek help. Whenever I have a problem with a class I try to find people who have gone through and be like “Ok, what helped you? How did you make it? I need help.

Alba explained the willingness of other students to help and the importance of accessing resources UNC offers, like peer mentors who have previously taken a class. She stated:

Big lectures especially, offer a TA or students who have already taken the class that are willing to help and mentor and answer questions and go into further detail...for one of my classes I have like five peer mentors and two TAs and they have instruction all through the week, so they offer it anytime basically. And you can also message them and say “I need to meet up” and they are more than willing to help.

While UNC offers mentors for classes and students stress the importance of taking advantage of such resources, Ramon reported wishing that UNC offered “mentors and people from the same academic journey that you want to go through”. He expressed wanting to be able to consult with older students pursuing the same career path. He described such a mentor as “saying, ‘Oh, I know its hard’ and helping with recommending things and providing weekly checkups – like, ‘how are you doing?’” These statements illustrate the importance that UNC students place on

seeking out peers and professors for academic guidance, as well as the benefit they feel they derive from it. Such guidance seems to be conceptualized as the best means of navigating the challenging academic environment with high expectations.

Even more salient than the need for academic support was the need for a social-emotional support network. Hispanic/Latino students cited finding friends and a supportive community as a challenge at the start of their freshmen year but ultimately a key to effectiveness at UNC. This subtheme of social-emotional support was coded 26 times across the feasibility questionnaire responses and interviews. Of the 26 students who provided this data, 18 mentioned the need for a social-emotional support network. Benita, a first generation college student, commented that even though people told her many things about what college would be like, “I never really got the idea of how it was going to be until I came here...it was completely different from what I expected and there weren’t a lot of people I could share that experience with at the beginning.” Margarita, an international student, elaborated on the difficulty and importance of finding that support system even though it is difficult:

It’s been what, three months? Meeting someone and actually getting close is hard, but you kind of have to. You need that. So you have to find someone that you barely know...you want them to understand and they barely know you, so it’s really hard. My best friend from home gave me this USB with messages from all my friends that I can look at when I miss them. So lately I was missing one of my friends and was watching, and he makes a list of things that I’m great at that will help me through college. And I kind of cried because there’s no one here who could make a list like that. That’s frustrating because there are so many times that you need someone. I bet everyone here feels frustrated about not finding close friends, but for me its hard not being able to go home. Getting one of those deep hugs would make it so much better and make that stress leave your head for a bit so you can concentrate on studying.

Even with the awareness that the challenge of finding others may be a part of everyone’s first year experience, this student highlighted the need to balance getting emotional support from close friends from home and reaching out to meet new people that directly understand the UNC

environment. Benita, a sophomore, reinforced this point in sharing what has ultimately helped her make the transition,

Finding a community. It's so easy to just want to stay in my room and not make the effort to make friends and find people who think the way I do or feel the way I do or are going through the same things I am. So just trying to surround yourself with people that support you and keep you motivated.

Ramon echoed this sentiment in his description of leaning on his friends for emotional support, "It's been important to me to have a community of friends...they see things I can't see about myself. They can say, 'Hey you're not getting enough sleep' or, 'Hey you seem down, what's going on?'" Benita emphasized the need for a support system to access when presented with a challenge, "Just find people who you know will understand and listen and not let you just mope about it but will encourage you to do better and to motivate you to keep going." These are supportive of the SEL program goal of stimulating discussions around social emotional support at the university and fostering a supportive environment within the group itself.

The first SEL session of the intervention therefore centered on the topic of sense of belonging, given that the literature also indicates that sense of belonging is a promotive factor for Hispanic/Latino students. The session was constructed with the dual purpose of beginning to foster relationships between group members and also facilitating discussion of the universality of social challenges upon beginning college. While the qualitative data support the inclusion of such program content, the first session was identified as the least helpful session on the posttest survey taken by program participants. When asked which session was least helpful on the feasibility questionnaire, 10 of the 23 (43.5%) participants who completed the questionnaire chose the first, although 2 of 23 cited it as the most helpful session. Qualitative analysis helped place this information in context. Students reported that they enjoyed the discussion of social challenges that everyone faces at the start of college, but four students expressed that activity

based on generating advice for incoming freshmen did not feel as focused on them as they would like. For example, one student wrote:

Most of the session was good in that we had to consider how we handle the social changes that are part of coming to college, and I liked seeing that others have taken a while to find their true group of friends, but the part where we said something to an incoming student felt like the focus was off of us.

Another shared that the first session was least helpful because she had already been told many things about what it would be like to come to college, but stated:

I did like the part where we got to open up and discuss how it was challenging for most of us at different times to adjust socially. I liked having first and second years in the group to see the different points people were at.

Thus, future SEL programming may want to consider shifting or shortening the focus on sharing a message with incoming freshmen to a simpler sharing of challenges one has experienced thus far in college, but continued inclusion of content on this topic is warranted.

Interestingly, analysis of students' feedback suggests that the small group nature of the program may have been a contributing force in bolstering sense of belonging. For example, in her interview, Benita described hearing the stories of her peers in the group as the primary aspect she would take away from the program. She explained:

I think it's the different personalities that I saw in the group. Like (insert name) seems like she works hard for what she wants and that's motivating. And like the other guy saying he used college to re-invent himself. If someone is awkward or something they can move on from that... its like a fresh start. That's a positive way to see it. So those two stand out as ways we are all different and have different perspectives but everyone in the group can learn from each other support each other.

Similarly, Hayley described her favorite part of the program as, "Meeting those people, I now see them and say 'hey', and we'll talk for five minutes and go our own way. It helps with the whole big school thing to know more people and see them around." Another student explained in their survey feedback, "It was nice to hear that we all have common goal of graduating from

UNC. So that was more meaningful for me because it made me feel less alone.” Overall, analysis of student feedback and interviews suggest that the ongoing nature of the group and ability to hear the stories of those in a safe setting was a powerful feature of the program, allowing students to reflect on the similar and different struggles and perspectives of others, as well as build relationships. Interestingly, even if these relationships only amounted to acquaintances, this was still supportive in that a large school felt smaller.

Hispanic/Latino support. Falling under the umbrella of sense of belonging, specific Hispanic/Latino support also emerged as a salient subtheme. This was the most commonly cited subtheme under the sense of belonging umbrella, as it was coded a total of 29 times and comprised 34.1% of the sense of belonging codes (85 total sense of belonging codes). The desire to connect with others of similar cultures was reflected in statements across Hispanic/Latino students of varying backgrounds. Margarita, an international student, expressed this desire to connect with others who share her culture, as well as her frustration in doing so:

I kind of expected there to be more people from other states or countries but I haven’t found many. Even Latin people that I’ve found, they’re like ‘I’m from Colombia and I’m like, ‘Oh, where did you study?’ and they’re like, ‘Oh no, I was born here’. I get that they are Latin and might know some Spanish, but being born and raised in Latin America is so different than having lived here. I don’t mean that as a bad thing - my best friend right now studied and lived in Spain and Honduras but went to high school here. The differences in that experience are massive but we still get along great and she has perfect Spanish so I can yell in Spanish and she’ll understand. So that’s great. I did expect a little more diversity here, but I’ve been able to cope because people are very interested and aren’t like, ‘Why aren’t you from North Carolina?’...But its weird for me that there’s not like a single place that I can go to that’s like back home.

This international student’s perspective was more pronounced than others in that she felt more acutely different from the student body, including many of her Hispanic/Latino peers. Other students expressed this sentiment with lower intensity, however. Particularly with regard to the importance of family and the difficulty of the transition out of their parents’ home, students

expressed that other Hispanic/Latino students understood them better than the rest of their UNC peers. Ramon expressed feeling that he and his fellow Hispanic/Latino students have a “strong urgency of family connection”, going on to state, “for me as a Hispanic that’s difficult - not seeing your parents and siblings all the time. Branching out from the family and having your own independence is hard but important.” Benita recalled a discussion her SEL program group had, stating, “Like the one girl was saying about family, and how we (Hispanics/Latinos) value respect and are very family oriented and other people are not. Sometimes you get bullied a little bit by what you do for your family by people who are not so family oriented and other students.” This sense of greater emphasis on family connectedness and giving back to one’s family was emphasized by multiple students as something that they felt supported by in talking with Hispanic/Latino peers, but sometimes caused them to feel dissimilar from other peers.

Students also indicated a hope that the university might be able to help in facilitating such connections at a large university. Several students mentioned the desire for a designated university space for Hispanic/Latino students, with Benita stating, “For sure one resource is having our own space. Getting a space is a big thing going on right now. A place that I can go where there are other amazing Hispanic people there and I can just talk to them”. Alba expressed the following desire for enhancing the Hispanic/Latino community at UNC:

More representation of the Latinx community in higher positions here. You don’t see many Latina or Latino chancellors or presidents, you know? So showing that the Latinx student is present and having someone to represent us that is in a higher position. I think that’s very empowering, seeing that we can get there.

Consistent with this desire for facilitating connection between members of the Hispanic/Latino community at UNC, several participants suggested that the SEL program could assist student participants in doing so. Several student responses on the posttest survey echoed this one:

I think it could be helpful to talk about relevant groups on campus that students could join, especially if this is a program mostly targeted at freshmen students. If there are Latinx organizations, share information about those so that students know those groups exist and how to join.

Lending support to idea that these students feel supported through connection with members of their culture, the opportunity to connect with other Hispanic/Latino students was a commonly cited positive of the SEL intervention. All three interviewed students in the treatment group stated that they would prefer the SEL program to remain exclusively a group for Hispanic/Latino students. Hayley described one reason why she felt this way:

It affirmed the belief that you don't have to look a certain way to be Hispanic. It made me feel better that I don't have to classify myself and Hispanic or white. There was another girl and she looked white and I thought that was amazing because it made me feel not alone. I knew I wasn't alone, but it was nice to see.

Benita echoed this sentiment:

I really enjoyed hearing the stories of the other students. Like one girl didn't even look Hispanic and I was like 'Oh, you're Hispanic'. So hearing from other people that are not the same background as me...its good to listen because even though we are all Hispanics, we are different. I am around a lot of people who are Mexican...so I like hearing from other people that are from Colombia - I like their stories. And (insert name), she and I are very different and it was very interesting to learn about her.

Other students expressed that they enjoyed the commonalities shared by their culture and the chance to meet others in a small group setting that shared these characteristics. Ramon shared that he enjoyed "meeting other people from your culture and seeing that they're at a prestigious university". He also expressed a preference for the all Hispanic/Latino group, explaining, "I didn't know too many other Latinos growing up and wasn't particularly close with other Latinos, so it was good to meet others and form relationships."

In particular, the SEL program session focusing on values seemed to facilitate Latino/a-specific conversations. Of the 23 students who completed the feasibility questionnaire, 8 (34.8%) cited this session as the most helpful, with only one student citing it as the least helpful.

One student in the treatment group described why she felt it was most helpful, sharing, “In coming to an environment with people who don't look like you or share similar values, you might lose sight of them. These sessions reminded me of the individual I am today.” Values were also cited as a means of guiding goals for college and increasing motivation. A student explained, “The session about values was most important to me because it helped me assess the people I hang out with and what motivates me to try my best in college”. Another participant reported, “I liked talking about our values because it made me think about who I choose to be friends with or spend my time with in college and what motivates me to work hard and make decisions in college.” Overall, the values session seemed to support students’ desire for a connection with others based on cultural values, and also as a driving force behind their ability to stay focused and motivated toward goals.

Self-management. Self-management was the second-most salient of the three major themes addressing the question of program content relevant to college student success at UNC. It was coded a total of 42 times across the feasibility questionnaire response and interviews. Of the 26 individuals who provided this data, 25 mentioned self-management. Self-management was defined as the ability to regulate one’s emotions, thoughts, and behaviors in different situations, including effectively managing stress, controlling impulses, and motivating oneself. This also includes organizing oneself to set and work toward personal and academic goals. Two significant subthemes emerged in this category, time management and stress management. Time management comprised 40.5% of the codes in the self-management category and stress management comprised 26.2%. The remaining items coded as self-management addressed aspects of self-management such as study skills (coded a total of 5 times) and goal setting (coded a total of 4 times), which were least frequently coded but valid nonetheless.

The most salient subtheme was time management skills, which was defined as the ability to organize and plan how to use time effectively, including systematic prioritizing of time allocation amongst competing demands. Time management was coded 17 times across the feasibility questionnaire response and interviews. Of the 26 individuals who provided this data, 13 people mentioned time management. Students reported that learning to prioritize tasks and balance all the opportunities available is often a challenge faced by incoming freshmen. Benita stated in her interview:

I knew there would be a lot of things to do but you can't do everything. So I tell myself that - I can't do everything and schoolwork is first. I really want to do all these clubs and be involved but I had to really limit myself. Now I'm kind of struggling with all the club commitments I have.

This sentiment was echoed by Margarita, "A definite strength is being able to balance your social life with the academic life because that's hard at the beginning". She went on to describe, "You want to meet everyone and be everywhere...all the meetings and groups and events. But then you go home and it's midnight and you have homework for tomorrow. So that's a balance you have to learn." Several students reported that setting goals helps them with this process of prioritizing, as the reminder of their goal helps them decide which of several activities to pursue. Students also indicated a relationship between time management and stress, suggesting that good time management skills help to manage stress. One student, emphasizing that stress can lead poor time management and vice versa, gave the suggestion for the SEL program, "I would add more topics such as time management or how to manage stress". Practical components of time management such as using a planner or online scheduling platform or having the skill of planning in advance were cited as helpful strategies for time management.

Stress management was also a subtheme of self-management when students were discussing qualities that make for a successful college experience. It was coded 11 times across

the feasibility questionnaire response and interviews. Of the 26 individuals who provided data, 8 participants mentioned stress management. Within this subtheme, students most frequently commented on the stress of managing responsibilities and social demands, indicating a relationship between time and stress management. Additionally, however, students described the need to have strategies for coping when responsibilities or situations become overwhelming.

Hayley explained an important skill for college students to have:

I guess keeping your cool. I used to really speak out on stuff with my parents - I just let stress get the best of me and I'd start freaking out, but I just have to remember it's ok. It's ok that I'm going to stress out once in a while. I just need to find ways to avoid getting to that breaking point, I guess. But so far it's been good, I haven't had any meltdowns yet. And I think the whole time management thing helps, like I use a Google calendar to visually see ok this is what I have for today and get stuff done. I can see that I can get there.

Other students cited strategies for coping with stress such as giving themselves study breaks, talking with someone they trust, taking time alone to process, getting enough sleep, and doing exercise. Rodgrigo stated that he would like for UNC to provide more supports in addressing issues such as stress and emotional health, saying,

They give a lot of support in homework and studying, but they need to help you out in your wellness. I know campus health has a lot of events, but it could be a little bit more. I enjoy doing those exercises and it helps me out, it just relieves stress. It may not be as important to other students, but its known to help students, so...

While this student was the only person to state that he wished UNC would provide more direct supports and programming for stress management, many students conveyed that a critical skill for success at UNC is the ability to manage stress and frustration.

In the SEL intervention, self-management skills were address largely through the session focused on goal setting, although the growth mindset session also touched on skills that might help students change their mindset in order to cope with a difficult or stressful situation. The self-management session focused largely on setting goals and articulating steps and barriers to

reaching them. Interestingly, goal-setting itself did not emerge as a salient theme for success according to students. When it was mentioned, however, it was mentioned as a method of staying motivated if something is challenging or they encounter a setback. When asked to cite the most helpful session of the four, 14 of the 23 students (60.9%) who completed the feasibility questionnaire cited the goal setting session. Of those 23 students, 5 (21.7%) cited it as least helpful. Analysis of qualitative responses suggested that there were several reasons that those who cited it as their favorite did so. First, it helped them clarify their goals by discussing them with others, writing them down, and considering the sub-goals that would be required to achieve them, as well as any barriers. One posttest survey response was, “It made me think through all the goals I had, but I also had to think of all the obstacles I would or could face. So, it just made me think of different possibilities and prepare”. Another student citing feeling more prepared to navigate barriers because she had already thought through what they might be and how to approach them. Several students also discussed a change in mindset around goal setting because of the session. For example:

I liked the goal setting session, which was harder for me, because sometimes I set goals that are too high and don't reach them, and that is frustrating. But hearing other people's perspectives helped me realize that it's okay not to always reach my goals, as long as I keep setting new ones and working toward something. And it also made me think about how to try to set more realistic sub-goals so that I have a bigger chance of reaching my goal and not becoming frustrated.

For the five students who cited the goal setting session as their least favorite, response analysis indicated that one reason was because they felt they already had very clear goals set prior to participating in the program. One student shared, “My goals are something I have in my mind everyday. I did not learn anything new”. Two students in the first iteration also indicated that they felt it was least helpful because they “have no idea what the future holds” for their career, which was the impetus for the facilitator providing goal setting examples that were more

general or related to personal goals during the second and third program iterations of the program. Benita, who participated in iteration two of the program, commented in her interview,

I always thought it was kind of ridiculous to keep goals, because if you have a goal you just have to work for it, so why waste time coming up with what they are? This made me realize that goals are good to have because they are something to work for. So I wake up in the morning and I'm like okay, I'm going to become a doctor, what to do today. Because its hard to wake up at 8 am, so I just remind myself of the kid that you could be saving or the parents that are freaking out because of their child. That kind of stuff helps me get through the day and get my work done and go to clubs and meet new people.

While many students did not specifically mention goal setting as a means of being successful in college, a number of comments such as this one suggest that having goals is linked to perseverance, a skill that students overwhelmingly stated was necessary at UNC.

Growth mindset. Growth mindset was the least salient of the three major themes addressing the question of program content relevant to college student success at UNC. It was coded a total of 18 times across the feasibility questionnaire response and interviews. Of the 26 individuals who provided this data, 14 mentioned growth mindset. Growth mindset was defined as the belief that intelligence is a malleable construct that can be expanded with effort and learning. Under growth mindset theory, failure is conceived as an opportunity for expansion of intelligence, not an indicator of lack of it. Only one significant subtheme emerged in this category, that of perseverance. Perseverance comprised 77.8% of codes in the growth mindset category and it was defined as steadfastness in completing a task or pursuing a goal despite difficulty or delay in achieving success.

In discussing the need for growth mindset and perseverance, students repeatedly conveyed the belief that UNC is academically challenging and students can become intimidated by high expectations and the accolades of peers. Ramon explained:

At UNC, everybody was at the top of the food chain in high school, so everybody is really brilliant. You compare yourself to others on campus and you forget that you're a

smart person in your right and you've accomplished things too. It's hard - you can get really depressed - like you don't seem like you're good enough to be here. You have to remember that UNC picked you for a reason. You have to keep going and not be fazed by anything like that.

Rodrigo described how he believes obstacles or setbacks should be handled, "You have to find a way around it. I say if you can't go straight, find a way around it, so even if it's not the way you want to go, it will get you through it." Alba explained that an important skill for college success is, "being resilient. You're going to make a bad grade sometimes but you can't let that put you off or discourage you." Similarly, Rodrigo described how this affects students who already have the necessary time management or academic skills to be successful, stating, "You just have to be determined. When some students feel overwhelmed, they just don't have the drive to go forward and that's what gets them to stop doing their work." Hayley described the intimidating nature of the academic rigor that is a reality at UNC, as well as the strategies she uses to help herself persevere when she feels overwhelmed by the challenge:

I'm hoping that I won't let the hard classes at Carolina stop me from reaching those dreams because I hear people say these physics or chemistry classes are hard and I'm like oh gosh I'm going to have to take these classes...But, I have cochlear implants and had to go through a lot of obstacles, so reminding myself of that helps me be motivated to go forward and go into the medical field and stuff...I try to remind myself of my past and how much I've overcome in high school and middle school and elementary school. I try to remind myself that it'll be okay and I've gotten this far and to just keep pushing.

Several other students described the strategies they use to cope with the sometimes-overwhelming rigor and prestige that goes with being a student at Carolina. For example, Margarita described feeling intimidated by competing against very smart students, but reframed it positively by saying, "But, I'll learn from them." She went on to continue to reframe the situation, highlighting the need for students to remind themselves that they too were accepted for a reason, "There's a clear reason why you got in and there's something special about you." She also describes using self-talk with herself to problem solve and persevere:

Just dealing with it myself and sitting down being like, “Ok, (insert own name), come on. This is not you. Sit down, breathe, concentrate, you need to do this.” Honestly college is more about you trying to understand what you’re capable of and what you can do. Just breathe and think, “What’s going on? Is this because of you or because of the class? Are you not putting in enough work or is the class too hard?” And its mostly you not putting enough work. You can do better, you just haven’t really figured out how.

SEL program session three was aimed at addressing such issues through a discussion of growth mindset. On the feasibility questionnaire, 3 of the 23 students who completed it cited the growth mindset as the most helpful session and only one cited it as the least helpful. One individual wrote, “I enjoyed the growth mindset session because it made me think about how I can change how I think about a failure or a challenging situation”. Several participants also mentioned learning new information from this session. For example, Benita shared,

I do think one of the lessons that we went over about intelligence was really helpful, because I do have friends who fail classes and they tell themselves “ I am not smart enough”. So they have a fixed mindset that they’re not smart and they can’t do it. Now I’m like just because you failed doesn’t mean that you can’t do it. So I think defining intelligence and fixed mindset was a big one for me.

Another treatment group participant explained that this is a hard skill to change, but she appreciates having the knowledge about mindset and is working toward changing it. She stated, “The mindset stuff...I never knew that so I’m trying to do little things to fix my mindset. That’s very challenging though but it’s coming, it’s coming.” While students did not often cite the growth mindset session as their favorite, the content links well with the frequently expressed concerns about how to approach a failure or a setback at UNC. Given the fact that almost all students reported that it was a relevant session in the program, as well as feedback from a number of students about how they are trying to apply the growth mindset principles to challenging situations, it appears to be a productive session.

SEL program delivery. Student participants were also asked in the feasibility questionnaire and individual interviews to comment on the format and delivery of the program.

Responses to the Likert scale and yes/no items on this topic were largely in a positive direction, suggesting students feel that the program delivery was effective. Frequency data for these responses are shown in Table 9 in Appendix A. Of the treatment group participants, 87% indicated that there was a good balance of discussion and hands-on activities, but three students indicated that there was too much hands on activity and not enough discussion. Qualitatively, several students reported they would have liked to have more discussions, although several also reported enjoying the hands on activities. One student reported, “I also liked how we had the worksheets but it wasn’t boring. It was actually useful; we aren’t going to just throw this paper away. We actually kept it so we can look at it and be like okay this is what I need to do.” One interesting suggestion around the types of activities that should be included came from Ramon in his individual interview, as he described enjoying the activities in the group. He suggested, “Have activities outside of those meetings and homework assignments to think things through outside of the session. I think that would help us collaborate more and think about things better.” He explained that he liked the in-group activity format and the chance to complete them with other students, believing that out-of-session work would enhance relationships and deepen thinking about the skills.

With regard to facilitation of the program sessions, all except one student indicated that program content was explained clearly and that the group leader was engaging (“*somewhat agree*” 13%, “*strongly agree*” 82.6%). Of the treatment group participants, 91.3% indicated that the program was organized. Qualitative responses supported this data, with participants endorsing the facilitator as attempting to engage everyone and behaving in a friendly manner. Survey responses with regard to facilitator effectiveness largely mirrored this one, “She was kind and helpful in leading our discussions”. Interestingly, the group of students participating in the

third iteration was the largest group at ten students, but several of these student were very quiet. Thus, several members of this group gave the feedback that they would have liked the leader to force participation or structure each session to elicit more discussion from all members. This was unique to that iteration of the program, however, and limited to three comments.

All students indicated that they felt comfortable sharing their thoughts during the group sessions, with 87% strongly agreeing with the statement and 13% somewhat agreeing. Qualitative responses suggested that small group size contributed to the ability to share thoughts openly. Of the 14 total qualitative statements about group size, 11 of those highlighted the sentiment that the size of the group was small enough to facilitate discussion and a sense of community, and thus the small group size was preferred. One student wrote, “It’s a good size for everybody to be able to speak”. Hayley elaborated on this point:

I think the fact that it was a small group was really effective, instead of a big gathering like Carolina Firsts. I’m a Carolina First and it’s really hard to know people. Whereas in this group I know their faces and I know a little bit about their story so I thought that was effective.

With regard to other implementation features of the program assessed with the Likert scale items, 100% of treatment group participants agreed that the on-campus location was convenient for them. Of the treatment group participants, 95.7% felt that the fall semester was a good time for the program and that 50 minutes was the right length of time for each session, and 82.6% agreed that four group sessions was the right number of session to cover the content. Despite feeling as though four sessions was appropriate to the content, an emergent qualitative theme was that members desired additional sessions and topics. Of the 14 qualitative comments that mentioned program length, 12 of those comments emphasized that a longer program would be beneficial. This seemed to be primarily due to a desire to continue to get to know fellow

group members and cultivate the supportive aspect of the group. For example, one student suggested on the posttest feedback survey:

I think it could be a good idea to have five sessions. Either add some content (not sure what) or just do an introductory session for the first day, without the content, and then put the content from the first session as its own separate second session. That would make the program a little longer and allow us to get to know each other a little better.

The suggestion to break apart the first session was echoed in several other participants' feedback, but other suggestions emerged: "I feel like more sessions would be good. I think all of us were upset that last Thursday was our last session." Others reiterated wanting to continue to get to know people in their group, saying, "I would like more sessions. Maybe meet more than once per week or have the program go longer than four weeks." Ramon, who also expressed interest in out-of-group activities, suggested, "I would have like more meetings than 4 Mondays. Maybe double it and go through everything slower I guess, maybe go into more detail." In her individual interview, Hayley stated:

I feel like it should have been longer. We have so much to talk about and with every meeting that we had we always talked longer than our time together. I think there is so much more we could discuss to know that we're not alone.

While students felt that four sessions was enough to cover the content included in those sessions, analysis of their responses indicates that they would like more opportunity to benefit from the support and relationship-building occurring within the small group setting.

With regard to motivation to participate, many students gave the qualitative feedback on their feasibility questionnaire that food is a strong enough motivator for college students to participate. That is, students were asked, "What can group leaders do to motivate future students to come this program?" Of the 23 students who responded, 11 indicated that the provision of food at the program sessions was sufficient motivation to attend. For example, one student responded, "Everyone came at every session. I think the food incentive was appropriate

and worked effectively”. A less pronounced response (4 of 23 students) was that the opportunity to meet other Hispanic/Latino students would have been enough for some students to participate. Several students gave responses similar to this one: “To me, the motivation to meet other students of similar Latina background was enough, but having food is always helpful too.” Other isolated suggestions were to emphasize the open space and include testimonies from others about their experience that will encourage others to participate. Overall, the triangulation of quantitative and qualitative feedback regarding participation motivators and other topics of implementation suggested that the present delivery and format of the program was largely favorable.

Preliminary Outcomes

The second research question centered on the collection and analysis of the quantitative data from self-report measures completed by student participants in both the treatment and control groups. Students’ SEL skills of self-management, growth mindset, and sense of belonging were measured with Likert scale data with a subscale for each of the three SEL dependent variables. Comparison of the treatment and control groups change on SEL measures from pretest to posttest sought to determine whether Hispanic/Latino undergraduates participating in the SEL intervention showed greater gains in sense of belonging, self-management, and growth mindset. The researcher hypothesized that after participating in the intervention, Hispanic/Latino students would demonstrate greater gains in sense of belonging, self-management, and growth mindset than their peers in the control group. The following discrete variables were identified as covariates: SES, first generation status, generation of family which first immigrated to the U.S., high school GPA, and holding a job during college.

As described in chapter 3, the treatment and control groups were compared across demographic variables determined to be possible covariates. Demographic variables were not significantly different across treatment and control groups, with the exception of a statistically significant difference in the number of students reporting that a parent was born in Mexico, Pearson $X^2(1, N=51) = 3.96, p = .047$. That is, 47.8 % of participants in the treatment group reported such Mexican heritage, whereas only 21.4% of control group participants did so. Results of chi-square and Fisher's tests used to determine independence of categorical demographic variables are shown in Table 7 in Appendix A, and results of independent t-tests conducted with continuous demographic variables are shown in Table 6 in Appendix A. In order to investigate whether participation in any other service or organization concurrent to the intervention might influence change from pretest to posttest, students also identified other organizations they intended to participate in that semester. Treatment and control groups were not statistically significantly different in their endorsement of organizations, with the exception of the CLC. There was a significant difference in number of students in the treatment and control group indicating that they would participate in the CLC that semester, Pearson $X^2(1, N=51) = 8.42, p = .004$. 85.7 percent of students in the control group indicated that they would use the CLC that semester, whereas only 47.8 percent of students in the treatment group indicated they would do so. Comparisons of university services use using Pearson chi-square and Fisher's exact tests are shown in Table 8 in Appendix A.

In conducting preliminary analyses, data were first screened for missing values, outliers, and normality. Because the four participants who dropped out of the study did so before data collection, there were no missing data. Visual screening of the data indicated that there were no significant outliers and that the distributions of the dependent variables were relatively normal,

with skewness of $-.023$ ($SE = .33$) and kurtosis of 2.78 ($SE = .66$) for self-management change, skewness of $-.45$ ($SE = .33$) and kurtosis of $.70$ ($SE = .66$) for growth mindset change, and skewness of $.64$ ($SE = .33$) and kurtosis of 1.04 ($SE = .66$) for sense of belonging change. These values suggested that the data are slightly positively skewed, but given that the skewness values are between -1 and 1 , can be interpreted as relatively normal. Homogeneity of variance was also determined through Levene's test of homogeneity of variance, shown in Table 11 in Appendix A. Thus, ANOVA assumptions regarding relative normality of data, homogeneity of variance, and independence of cases were met. Primary analyses then addressed the question of whether the treatment group participants showed greater SEL gains than the control group participants. Table 12 shows the means and standard deviation for average self-management, growth mindset, and sense of belonging at pretest and posttest, as well as the change between the two time points, reported across treatment and control groups.

Table 12

Average Pretest, Posttest, and Change Scores for Self-Management, Growth Mindset, and Sense of Belonging: Means and Standard Deviations

Dependent Variable ¹		Treatment		Control	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Self Management	Average Pretest	4.81	.85	5.20	.46
	Average Posttest	4.99	.76	4.99	.66
	Average Change	.18	.70	-.21	.47
Growth Mindset	Average Pretest	4.68	.81	4.30	1.05
	Average Posttest	5.10	.95	4.30	1.02
	Average Change	.42	.95	.00	1.29
Sense of Belonging	Average Pretest	3.97	.70	4.12	.67
	Average Posttest	4.44	.76	3.94	.92
	Average Change	.47	.65	-.18	.54

¹For each individual, responses to Likert-scale items on each of the three SEL scales were averaged at pre and posttest to create summary scores called Average Pretest and Average Posttest. On the Likert scale, a score of 1 represented "strongly disagree" and 6 represented "strongly agree". The Average Change score was calculated for each participant by subtracting his or her Average Pretest score from his or her Average Posttest score.

A two-way repeated measures ANOVA was used to determine the effect of intervention condition and time on the three dependent variables of self-management, growth mindset, and sense of belonging. In order to address the differences in the treatment and control group on the Mexican descent demographic and use of the CLC during the intervention, linear regressions were computed. The purpose of these analyses was to determine whether the ANOVA effects held true when controlling for these two covariates. Results of these analyses are described separately for each of the three dependent variables below.

Sense of Belonging. A two-way within-subjects analysis of variance was conducted to evaluate the effect of intervention condition and time on average sense of belonging. The dependent variable was average sense of belonging based on participant self-rating. The within-subjects factors were time with two levels, pretest and posttest, and intervention condition with two levels, treatment and control. The time x condition interaction effect was tested using the multivariate criterion of Wilk's lambda (Λ). The time x condition interaction effect was significant, $\Lambda = .76$, $F(1, 49) = 15.16$, $p = .00$. The univariate test of the time main effect was not significant, $F(1, 49) = 3.05$, $p = .09$. The univariate test of the condition main effect was also not significant, $F(1, 49) = .80$, $p = .38$. A summary of these results is shown in Table 13.

Table 13.

Comparing Sense of Belonging Over Time Across the Treatment and Control Conditions: Two-Way Repeated Measures Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Time*Condition	1	2.64	2.64	15.16	.00*
Time	1	.53	.53	3.05	.09
Error (time)	49	8.55	.17		
Condition	1	.81	.81	.80	.38
Error (condition)	49	49.91	1.02		

*Significant at the $p < .05$ level

Given the significant interaction effect, two paired samples *t*-tests were computed to assess differences between methods at each time period using Holm's Bonferroni approach. At pretest, there was no significant difference between the treatment and control groups, $t(49) = .75, p = .46$. At posttest, average sense of belonging was significantly higher for the treatment condition than the control condition, $t(49) = -2.1, p = .04$. Examination of means, shown in Table 12, revealed that the average change for the treatment group was in the positive direction whereas the average change for the control was in the negative direction. In terms of meaningful change on the sense of belonging variable within the treatment group, the gains appear to be small but positive. The average pretest sense of belonging mean of 3.97 equates to slightly below "somewhat agree" on the Likert scale and moving to above "somewhat agree" at posttest ($M = 4.44$). This suggests that the treatment group made significant gains in sense of belonging as a result of the intervention, while the control group's sense of belonging did not change in a significant way during the time of the intervention.

A linear regression analysis was conducted to evaluate the prediction of change in sense of belonging based on intervention condition (treatment or control), controlling for the demographic variables that were found to differ significantly across the treatment and control groups. The first model was computed with intervention condition (control or treatment) entered as a predictor of average sense of belonging, and a significant regression equation was found, $R^2 = .24, F(1, 49) = 15.16, p = .00$. In controlling for the difference in Mexican heritage between the treatment and control group, the Mexican heritage variable was then added to the model as a predictor. Even with this addition to the model, the treatment or control group participation still explained a significant amount of variance in sense of belonging change, $R^2 = .26, F(2, 48) = 8.49, p = .001$. Change in sense of belonging still statistically significantly differed between the

treatment and control conditions, $b = .71$, $t(48) = 4.12$, $p = .00$. The Mexican heritage variable did not make a significant contribution to the prediction, $b = -.23$, $t(48) = -1.27$, $p = .21$. These results are shown in Table 14.

Table 14.

Contributions of Mexican Heritage to the Prediction of Growth Sense of Belonging: Linear Regression Coefficients

Model		b	Standard Error	t	p
1	(Constant)	-.18	.11	-1.60	.12
	Treatment or Control Group	.65	.17	3.89	.00*
2	(Constant)	-.13	.12	-1.20	.28
	Treatment or Control Group	.71	.17	4.12	.00*
	Mexican Heritage	-.23	.18	-1.27	.21

*Significant at the $p < .05$ level

Similarly, A linear regression analysis was also conducted to evaluate the prediction of change in sense of belonging based on group condition (treatment or control), controlling for the differences in treatment and control group participation in the CLC. Again, the first model was computed when intervention condition (control or treatment) was entered as a predictor of average sense of belonging, and significant regression equation was found, $R^2 = .24$, $F(1, 49) = 15.16$, $p = .00$. In controlling for the difference in CLC participation between the treatment and control group, the CLC variable was then added to the model as a predictor. Even with this addition to the model, treatment or control group participation still explained a significant proportion of variance in sense of belonging, $R^2 = .24$, $F(2, 48) = 7.48$, $p = .001$. Change in sense of belonging still statistically significantly differed between the treatment and control conditions, $b = .63$, $t(48) = 3.40$, $p = .001$. The CLC variable did not make a significant contribution to the prediction, $b = -.06$, $t(48) = -.30$, $p = .77$. These Results are shown in Table 15.

Table 15.

Contributions of CLC Participation to the Prediction of Sense of Belonging: Linear Regression Coefficients

Model		<i>b</i>	Standard Error	<i>t</i>	<i>p</i>
1	(Constant)	-.18	.11	-1.60	.12
	Treatment or Control Group	.65	.17	3.89	.00*
2	(Constant)	-.13	.20	-.63	.53
	Treatment or Control Group	.63	.18	3.40	.00*
	CLC Participation	-.06	.20	-.30	.77

*Significant at the $p < .05$ level

Overall, these results suggest that the greater positive change in the treatment group's sense of belonging was not the result of differences in Mexican heritage or in student use of the CLC concurrent to the SEL intervention. This is reinforced by the fact that both the ANOVA data and the regression analyses indicated that treatment or control condition participation is a significant predictor of change in sense of belonging from pretest to posttest.

Growth Mindset. A two-way within-subjects analysis of variance was conducted to evaluate the effect of intervention condition and time on average growth mindset. The dependent variable was average growth mindset skills based on participant self-rating. The within-subjects factors were time with two levels, pretest and posttest, and intervention condition with two levels, treatment and control. The time x condition interaction effect was tested using the multivariate criterion of Wilk's lambda (Λ). The time x condition interaction effect was not significant, $\Lambda = .97$, $F(1, 49) = 1.68$, $p = .20$. The univariate test of the time main effect was also not significant, $F(1, 49) = 1.68$, $p = .20$. The univariate test of the condition main effect was significant, $F(1, 49) = 7.35$, $p = .01$. A summary of the within-subjects results is shown in Table 16.

Table 16.

Comparing Growth Mindset Over Time Across the Treatment and Control Conditions: Two-Way Repeated Measures Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Time*Condition	1	1.12	1.12	1.68	.20
Time	1	1.12	1.12	1.68	.20
Error (time)	49	32.58	.67		
Condition	1	8.91	8.9	7.35	.01*
Error (condition)	49	59.33	1.21		

*Significant at the $p < .05$ level

Given the significant main effect for condition, two paired samples *t*-tests were computed to assess differences between methods at each time period using Holm's Bonferroni approach. At pretest, there was no significant difference in average growth mindset across the treatment and control conditions, $t(49) = -1.44$, $p = .16$. At posttest, average growth mindset was significantly higher for the treatment group than the control group, $t(49) = -2.89$, $p = .01$. Examination of means, shown in Table 12, indicated that the average growth mindset for the treatment condition moved in the positive direction from pretest ($M = 4.68$) to posttest ($M = 5.10$), suggesting that the treatment group's self-management skills increased over time. In contrast, the average growth mindset for the control condition did not increase from pretest ($M = 4.30$) to posttest ($M = 4.30$).

A linear regression analysis was conducted to evaluate the prediction of change in growth mindset based on group condition (treatment or control), controlling for the demographic variables that were found to be different across the treatment and control groups. The first model was computed with intervention condition (control or treatment) entered as a predictor of growth mindset, and a non-significant regression equation was found, $R^2 = .03$, $F(1, 49) = 1.68$, $p = .20$. In controlling for the difference in Mexican heritage between the treatment and control group, the Mexican heritage variable was then added to the model as a predictor. Even with this

addition to the model, the treatment or control group participation still did not explain a significant proportion of variance in growth mindset change, $R^2 = .04$, $F(2, 48) = .88$, $p = .42$. Change in growth mindset was still not statistically significantly different between the treatment and control conditions, $b = .45$, $t(48) = 1.33$, $p = .19$. The Mexican heritage variable did not make a significant contribution to the prediction, $b = -.12$, $t(48) = -.34$, $p = .73$. These results are shown in Table 17.

Table 17.

Contributions of Mexican Heritage to the Prediction of Growth Mindset: Linear Regression Coefficients

Model		<i>b</i>	Standard Error	<i>t</i>	<i>p</i>
1	(Constant)	.00	.22	.00	1.00
	Treatment or Control Group	.42	.33	1.30	.20
2	(Constant)	.03	.23	.11	.91
	Treatment or Control Group	.45	.34	1.33	.19
	Mexican Heritage	-.12	.36	-.34	.73

*Significant at the $p < .05$ level

Similarly, a linear regression analysis was also conducted to evaluate the prediction of change in growth mindset based on group condition (treatment or control), controlling for differences in treatment and control group participation in the CLC. Again, the first model was computed with intervention condition (control or treatment) entered as a predictor of average growth mindset, and a non-significant regression equation was found, $R^2 = .03$, $F(1, 49) = 1.68$, $p = .20$. In controlling for the difference in CLC participation between the treatment and control group, the CLC variable was then added to the model as a predictor. Even with this addition to the model, treatment or control condition still did not explain a significant proportion of variance in growth mindset change, $R^2 = .04$, $F(2, 48) = 1.11$, $p = .34$. Change in growth mindset was still not statistically significantly different in the treatment group than in the control group, $b =$

.31, $t(48) = .87, p = .39$. The CLC variable did not make a significant contribution to the prediction, $b = -.29, t(48) = -.75, p = .46$. These results, shown in Table 18, suggest that the failure to find significant differences in treatment and control group growth mindset change were not due to differences in Mexican heritage or student use of the CLC during the intervention.

Table 18.

Contributions of CLC Participation to the Prediction of Growth Mindset: Linear Regression Coefficients

Model		<i>b</i>	Standard Error	<i>t</i>	<i>p</i>
1	(Constant)	.00	.22	.00	1.00
	Treatment or Control Group	.42	.33	1.30	.20
2	(Constant)	.25	.39	.62	.54
	Treatment or Control Group	.31	.36	.87	.39
	CLC Participation	-.29	.38	-.75	.46

*Significant at the $p < .05$ level

Overall, these results suggest that the absence of significant change in the treatment group's growth mindset was not the result of differences in Mexican heritage or in student use of the CLC concurrent to the SEL intervention. This is reinforced by the fact that both the ANOVA data and the regression analyses indicated that treatment or control condition participation was not a significant predictor of change in growth mindset from pretest to posttest.

Self-Management. A two-way within-subjects analysis of variance was conducted to evaluate the effect of intervention condition and time on average self-management. The dependent variable was average self-management skills based on participant self-rating. The within-subjects factors were time with two levels, pretest and posttest, and intervention condition with two levels, treatment and control. The time x condition interaction effect was tested using the multivariate criterion of Wilk's lambda (Λ). The time x condition interaction effect was significant, $\Lambda = .90, F(1, 49) = 5.76, p = .02$. The univariate test of the time main effect was not

significant, $F(1, 49) = .04, p = .84$. The univariate test of the condition main effect was also not significant, $F(1, 49) = 1.19, p = .28$. A summary of the within-subjects results is shown in Table 19.

Table 19.

Comparing Self-Management Over Time Across the Treatment and Control Conditions: Two-Way Repeated Measures Analysis of Variance

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i>
Time*Condition	1	.99	.99	5.76	.02*
Time	1	.01	.01	.04	.84
Error (time)	49	8.38	.17		
Condition	1	.916	.916	1.19	.28
Error (condition)	49	37.78	.77		

*Significant at the $p < .05$ level

Given the significant interaction effect, two paired samples *t*-tests were computed to assess differences between methods at each time period using Holm's Bonferroni approach. At pretest, average self-management was significantly higher for the control group than the treatment group, $t(49) = 2.07, p = .04$. At posttest, there was no significant difference in average self-management for the treatment and control groups, $t(49) = -.04, p = .97$. Examination of means, shown in Table 12, indicated that average control condition self-management decreased from pretest ($M = 5.20$) to posttest ($M = 4.99$), suggesting that the control group's self-management skills decreased over time. While the treatment condition moved slightly in the positive direction from pretest ($M = 4.81$) to posttest ($M = 4.99$), it is difficult to draw conclusions about the effect of the intervention, given that the treatment and control groups differed significantly at pretest on self-management skills. It is possible that the negative change in the control group simply represented a regression to the mean.

A linear regression analysis was conducted to evaluate the prediction of change in self-management based on group condition (treatment or control), controlling for the demographic variables that were found to be different across the treatment and control groups. The first model was computed with the intervention condition (control or treatment) entered as a predictor of self-management, and a significant regression equation was found, $R^2 = .11$, $F(1, 49) = 5.76$, $p = .02$. In controlling for the difference in Mexican heritage between the treatment and control group, the Mexican heritage variable was then added to the model as a predictor. This addition to the model altered the regression results such that treatment or control group participation no longer explained a significant amount of variance in self-management change, $R^2 = .11$, $F(2, 48) = 2.84$, $p = .07$. Despite this, change in self-management still statistically significantly differed between treatment and control conditions, $b = .41$, $t(48) = 2.34$, $p = .02$. The Mexican heritage variable did not make a significant contribution to the prediction, $b = -.04$, $t(48) = -.21$, $p = .84$. These results are shown in Table 20.

Table 20.

Contributions of Mexican Heritage to the Prediction of Self-Management: Linear Regression Coefficients

Model		<i>b</i>	Standard Error	<i>t</i>	<i>p</i>
1	(Constant)	-.21	.11	-1.94	.06
	Treatment or Control Group	.40	.17	2.40	.02*
2	(Constant)	-.21	.12	-1.74	.09
	Treatment or Control Group	.41	.17	2.34	.02*
	Mexican Heritage	-.04	.18	-.21	.84

*Significant at the $p < .05$ level

A linear regression analysis was also conducted to evaluate the prediction of change in self-management based on group condition (treatment or control), controlling for differences in treatment and control group participation in the CLC. Again, the first model was computed with

the intervention condition (control or treatment) entered as predictor of self-management, and a significant regression equation was found, $R^2 = .11$, $F(1, 49) = 5.76$, $p = .02$. In controlling for the difference in CLC participation between the treatment and control group, the CLC variable was then added to the model as a predictor. The addition of the CLC variable altered the regression results such that treatment or control group participation did not explain a significant amount of variance in self-management change, $R^2 = .11$, $F(2, 48) = 3.05$, $p = .06$. With the addition of this variable, change in self-management no longer statistically significantly differed between treatment and control conditions, $b = .35$, $t(48) = 1.92$, $p = .06$. The CLC variable itself did not make a significant contribution to the prediction, $b = -.13$, $t(48) = -.65$, $p = .52$. These results are shown in Table 21.

Table 21.

Contributions of CLC Participation to the Prediction of Self-Management: Linear Regression Coefficients

Model		<i>b</i>	Standard Error	<i>t</i>	<i>p</i>
1	(Constant)	-.21	.11	-1.94	.06
	Treatment or Control Group	.40	.17	2.40	.02*
2	(Constant)	-.11	.20	-.53	.60
	Treatment or Control Group	.35	.18	1.92	.06
	CLC Participation	-.13	.19	-.65	.52

*Significant at the $p < .05$ level

Overall, linear regression results thus suggest that the differences in treatment and control group self-management change may have been influenced by the CLC and/or Mexican heritage variables. Both the ANOVA data and the regression analyses indicated that treatment or control condition participation is a significant predictor of change in self-management from pretest to posttest. The linear regression analyses, however, suggest that CLC participation and/or Mexican heritage variables may have influenced this outcome, rather than the results being clearly attributable to participation in the treatment or control group. Thus, it is difficult to draw

conclusions about whether participation in the treatment condition versus the control condition led to the difference in self-management over time.

Summary of findings. Analysis of frequency data indicated largely positive responses to the program. All students responded, “yes” when asked whether they would recommend the program and when asked whether the content was relevant to their lives. Of the treatment group participants, 91.3% indicated they were happy they participated, 87% indicated that the program would help them be a more successful student, 82.6% indicated that they learned new skills, and 86.9% expressed feeling more supported as a result of the program. When asked to identify a least helpful session, 9 of 23 students replied that they could not identify one. With regard to facets of program delivery, 87% reported a good balance of discussion and hands-on activities, 82.6% reported the facilitator was engaging, 100% that the location was convenient, 95.7% that the fall semester was the right time for the program, and 95.7% that 50 minute sessions were the right length. The use of food as a motivator for participation emerged as a salient qualitative theme, as did the positive aspects of the small group format and the desire for the program to last longer than four sessions.

With regard to salient themes around program content perceived as acceptable and feasible for inclusion in the program, sense of belonging was most salient, as it was coded 85 times. Within this, the following four subthemes were identified: social initiative (16.5% of sense of belonging codes), academic support (17.7%), social emotional support (30.6%), and Hispanic/Latino support (34.1%). Students indicated that these areas were commonly challenges faced by incoming students but ultimately critical to success, and thus these were also cited as benefits of the SEL program. Themes of student preference for the small group program format and more program sessions reflected the sense of belonging benefits associated with the group.

Analyses of outcomes of participation in the SEL program were consistent with these responses. That is, the treatment group made significant gains in sense of belonging as a result of the intervention, while the control group's sense of belonging did not change in a significant way during the time of the intervention.

The second-most salient theme was self-management, which was coded 42 times across the feasibility questionnaires and interviews. Of the 26 individuals who provided this data, 25 emphasized self-management. Two subthemes emerged, time management (40.5% of self-management codes) and stress management (26.2%). Students reported that prioritizing responsibilities effectively and managing frustration when faced with obstacles are keys to success at UNC. Goal setting did not emerge as salient, in that students did not mention this as a key to success at UNC. When participants were asked which session was their favorite on the feasibility questionnaire, however, 14 of 23 students identified the goal setting session. The cited the opportunity to make goals realistic by setting sub-goals and ultimately using these goals as a means of driving their motivation and helping with the task of prioritizing. Despite this, it is difficult to draw conclusions about the effect of intervention on self-management because the treatment and control groups differed at pretest on self-management. There was no significant difference between pre- and posttest self-management means for the treatment group, suggesting that the intervention did not result in positive change in self-management skills. There was, however, a significant difference between pre- and posttest for the control group, in that the control group's self-management decreased. Given that these groups differed at pretest, however, it is not possible to attribute this decrease to the intervention.

Lastly, growth mindset emerged as a salient theme, although it was the least emphasized at 18 total codes across the feasibility questionnaires and interviews. Of the 26 participants who

provided data, 14 individuals mentioned growth mindset. Perseverance was the only subtheme under growth mindset, comprising 77.8% of growth mindset codes. Students did not typically cite the growth mindset as either the least helpful session (1 student) or most helpful session (3 students). With regard to analysis of preliminary outcomes for growth mindset, average change in the treatment group did not significantly differ from the average change of the control group. Despite this, there was no significant difference between the control and treatment at pretest, yet at posttest they were significantly different. Given that the treatment group moved from a pretest average of 4.68 (below “moderately agree” on the Likert scale) to a posttest average of 5.1 (above “moderately agree”), this suggests positive movement occurred for the treatment group while it did not for the control group.

CHAPTER 5: DISCUSSION

The goal of this study was to investigate the feasibility and acceptability of an SEL program for Hispanic/Latino college students, as well as the preliminary outcomes of the intervention program. Results suggest that the participants perceived the program positively, with everyone stating that they would recommend it to freshmen and indicating that the content was relevant to their lives. Frequency data showed that almost all students were happy they participated, learned new skills, felt that they will be more successful as a result of the program, and felt more supported as a result of it. Analysis of frequency data and qualitative themes also suggested that the program method of delivery was effective, with participants overwhelmingly reporting satisfaction with program timing and location, session length, the balance of discussion and hands-on activities, and the facilitator's effectiveness. Use of a food as a motivator for participation was also cited as effective. Feasibility questionnaire responses and one-on-one participant interviews were utilized to analyze these perceptions in-depth, with a focus on identifying the core constructs of the SEL program.

In examining program content that is relevant to these students' needs, sense of belonging emerged as the most prominent theme. Four subthemes emerged under the sense of belonging umbrella, listed in order of salience: Hispanic/Latino support, social emotional support, academic support, and social initiative. While social initiative was the least prevalent subtheme, students indicated that taking the initiative to meet both other students and professors is necessary to developing the support network that forms the crux of the sense of belonging tenet. In turn, this

leads to crucial academic support, which students reported was critical in having other peers and professors to serve as guides in navigating the high expectations and academic rigor that is inherent to UNC. Similarly, finding social emotional supports was cited as a challenge of freshmen year but ultimately one of the most critical pieces of having a support network that can serve to provide motivation, stress relief, and emotional support when needed. Overall, the salience of sense of belonging for this population is consistent with past research indicating that support from peers and family and a sense of “fitting in” are related to persistence and lower reported distress in Hispanic/Latino college students (Arana et al., 2011; Castillo et al., 2004; Gloria et al., 2005; Saunders & Serna, 2004). This investigation extends this work to a PWI, suggesting that sense of belonging is as important in this setting as at a HSI. Furthermore, while previous studies have touched on the importance of peer and academic supports, the emergence of social initiative as an important aspect of college success is a new addition to the literature.

Participant emphasis on the need to overcome sense of belonging challenges and ultimately find a community is in line with the SEL program focus on sense of belonging as a core construct. This supports the inclusion of the session focusing on shared social adversity despite the fact that some students may desire minor changes to session format (i.e. the content should be geared more toward them than toward writing a message to incoming freshmen). Furthermore, the emergence of the small group format theme was based on student comments that small group size allowed them to feel more supported in sharing their thoughts, with the group serving as a small supportive community in which it was easier to get to know peers than in other larger UNC organizations. Students reported feeling supported by hearing others’ stories, challenges, and goals and expressed that it made a big school feel smaller. While UNC has several Hispanic/Latino oriented organizations offering small group events, it may be that the

ongoing nature of working with the *same* small group of individuals in the SEL program contributes to the feeling that a big school is made smaller. Similarly, the emergent theme of longer program length also reflected the desire to continue to develop a sense of community, with students wanting more program sessions in order to solidify the bond with peers in the group and have increasingly deeper conversations. Overall, analysis of preliminary outcomes also supported the inclusion of sense of belonging as a core construct, as the treatment group made significant gains in sense of belonging as a result of the intervention, while the control group's sense of belonging did not change in a significant way during the time of the intervention.

The theme of Hispanic/Latino support as facilitating college success and as a positive aspect of the SEL program was in fact the most salient of the sense of belonging subthemes. Students expressed the difficulties that can arise from the fact that the Hispanic/Latino population is a small percentage of the UNC population, and thus finding peers who share their culture is not always easy. Students shared that they would like a dedicated common space for Hispanic/Latino students and ways to better connect freshmen with Hispanic/Latino organizations. Analysis of qualitative responses suggested that students desire this connection with others who share their culture because UNC can feel quite different from home given that other students have different values. In particular, a number of students cited sometimes feeling that they are closer with their family than their non-Hispanic/Latino peers and find the transition to spending less time with their families to be more difficult. While it was clear that students desired friendships with other non-Hispanic/Latino students, they expressed that friendships and interaction with other Hispanic/Latino peers helps remind them where they came from and of their goals. This reflects the concept of “familismo” cited in previous research, which found

familismo to be grounded more in the need to find like-minded individuals than necessarily those of the same race or ethnicity (Segura-Herrera, 2006). Given that Segura-Herrera's (2006) study was done at a HSI, the current study extends prior work by suggesting that desire for familismo holds true at PWIs.

Student feedback suggests that the SEL program served as a conduit for facilitating the Hispanic/Latino connection. When students were asked whether they would prefer such an SEL program to include groups of diverse ethnicities or remain dedicated to Hispanic/Latino students, all three interviewees replied that they enjoyed the all-Hispanic/Latino component of the group. They cited the opportunity to see that others with the same values are also at a prestigious university, and the cited feeling less alone in their pursuit of common goals at UNC. The values session was cited by 8 of 23 students as the most helpful session, and analysis of responses suggested that students found it useful to regain sight of values that might otherwise be lost at a PWI and keep those values in mind to stay motivated toward goals. While this sense of cultural support was not specifically assessed in the pre and posttest assessments of preliminary outcomes, the qualitative analysis suggests that this piece contributed to overall changes in sense of belonging. Furthermore, this is consistent with Yeager and Walton's (2011) study with African American college students revealing that implementation of a values affirmation intervention bolstered students' sense of belonging such that they could fall back on their values as a reason to persist toward goals even if negative sense of belonging experiences occurred. Given that the current SEL program implemented the same values affirmation intervention, the aforementioned response to the values session and its benefits now lend support to the use of this intervention with Hispanic/Latino college students in addition to African American students.

With regard to the acceptability of program content, self-management emerged as the second most prominent construct. This is consistent with prior literature suggesting that these skills are a promotive factor for Hispanic/Latino college students, which drove the inclusion of this topic in the program (Le et al., 2005; Ojeda et al., 2011; Prospero et al., 2012). Under self-management, time management was the most salient subtheme followed by stress management, and the two were often linked. Students expressed that the ability to prioritize and balance competing social and academic demands is critical to success, and that this helps manage stress in conjunction with other important stress management skills like coping with frustration and practicing self-care. Such findings are consistent with prior research regarding promotive factors for Hispanic/Latino students, as other work has indicated that juggling competing demands and managing emotional reactions may be particularly critical for Hispanic/Latino college students, given that they are more likely to have family responsibilities or jobs than other students (Gandara & Contreras, 2009; Le et al., 2009; Petty, 2014; Próspero et al., 2012). While over half of the students in the current study's sample had not held a job in college, student responses indicate that the need for time and stress management skills still holds true due to balancing academic rigor and the need to get involved with other activities at UNC. Given the emergence of time and stress management as relevant to student success for this population, it may be useful to consider the addition of time and stress management content under the self-management umbrella.

Goal setting was not an independent subtheme under self-management despite past literature indicating that explicit setting of high goals was a predictor of Hispanic/Latino success (Cavazos et al., 2010; Le et al., 2005). While students did not describe goal setting as critical skill for college success, most students chose the goal setting session of the SEL program as their

favorite when asked on the posttest survey. In stating why, they cited the helpfulness of planning and preparing for possible obstacles, as well as the realization that it can be helpful to set sub-goals that are more achievable and remind them of their progress, rather than setting broader goals that are difficult to achieve. This was cited as a means of staying motivated when they are distracted by other opportunities, and thus played into the cited need for management of priorities. This reasoning is consistent with work showing that goal articulation interventions involving setting specific goals and identifying barriers helped students to internalize a sense of purpose and improved goal engagement and motivation (Duckworth et al., 2011; Morisano et al., 2010). These goal-setting studies, however, did not specifically test whether these interventions were effective in improving outcomes for Hispanic/Latino students. The current study did aim to test self-management intervention outcomes for this population, but analysis of preliminary self-management outcomes was not conclusive. That is, it was difficult to draw conclusions about the effect of the SEL intervention on self-management because the treatment and control groups differed at the pretest on self-management. Modifications to study methodology are thus necessary in order to reassess such changes, but such reassessment is supported by the participant satisfaction with the goal-setting session and prior research that supports goal setting as a promotive factor for this population (Cavazos et al., 2010; Le et al., 2005).

Despite the difficulty of drawing firm conclusions about self-management, it is interesting to note that the control group's perception of self-management skills decreased over time. It is possible that this was caused by the fact that the control and treatment conditions were statistically significantly different in their self-ratings of self-management at pretest, with the control group rating themselves higher than the treatment group. Thus, the decrease over time in the control group may simply have been a regression to the mean over time, and this problem

might be corrected with a larger sample size. It is also possible, however, that this decrease in control group perception of self-management skills actually reflects the increasing demands from the start of the fall semester to four weeks later. It may be that without the supports of the SEL program or something similar, the control group students increasingly felt that they were not able to manage to the intensifying demands of college. Such a phenomenon might result in the data found in this study, showing that the control group students' self-rated self-management skills decreased over the four-week period. It is thus possible that the SEL program focus on self-management skills helped the treatment group students to maintain their perception of self-management skills as the semester intensified, rather than their perception dropping off. Further study is needed to examine this possibility.

Growth mindset emerged as the least salient of the three major themes but was indicated as important for college success across over half of participants. Within this category, the subtheme of perseverance was central. Students highlighted the need to persevere despite insecurities about the academic rigor of UNC and the many accomplishments of peers, remembering that they were accepted for a reason. This is consistent with prior research indicating that minority students are more likely to internalize academic failures as indicative of lesser innate ability due to history of stereotype threat and discrimination throughout K-12 education (Dweck et al., 2011). Participants emphasized that it is critical to take a resilient approach to setbacks, using strategies like reminding themselves of what they have overcome in the past and problem solving reasons for a failure in order to improve the next time. The SEL session on growth mindset centered directly on these topics and thus linked well with the notion that UNC is challenging and that setbacks should be viewed as an opportunity to learn and move forward rather than a lack of intelligence. Only three students chose this as the most helpful

session, but only one cited it as least helpful, and it is thus assumed to be a productive session given the broader feedback that the program was helpful and relevant to student issues.

Furthermore, two of the three treatment group participants interviewed spoke about now noticing peers conceptualizing failures as a lack of intelligence or now trying to “catch themselves” using a fixed mindset.

While this feedback suggests that the SEL program may take a step toward students’ internalization of growth mindset concepts, the preliminary analysis of growth mindset outcomes did not suggest that the program led to gains in growth mindset. That is, the average change in the treatment group did not significantly differ from the average change of the control group. This could be due to the small sample size, given that small sample size is known to limit power to detect effects. This is particularly possible given that there was a statistically significant change in growth mindset in the positive direction from pretest to posttest but no change for the control group on this pre and post comparison. The failure to find significant change in growth mindset between the groups, however, may also be because growth mindset as measured by the questionnaire was already relatively high at the time of the pretest. The average growth mindset score at pretest was slightly above “mostly agree”, indicating that many students already possessed some knowledge that intelligence is malleable. While the 3-item questionnaire utilized to measure growth mindset has been validated with college students, Furnham’s (2014) study was conducted with a Caucasian and Asian population that was 82% students, and Dweck and colleagues’ 1995 study was conducted with a broad college population. Thus it is possible that the Hispanic/Latino population may better respond to a more nuanced questionnaire. It is also possible that the unique UNC environment is such that growth mindset is already reinforced in the broader population. Given these possibilities, it would be useful to make methodological

changes to the measurement of growth mindset, including a larger sample size and questionnaire validation, in order to determine if outcome measures will then be in line with the qualitative analyses suggesting that growth mindset is a key component.

That the three core constructs of sense of belonging, growth mindset, and self-management were found to be salient qualitative themes for the Hispanic/Latino population, as expected by the researcher, is likely a reflection of the fact that these three constructs were found to be salient for a broader population at UNC. Thus, while these results fit with prior work, this study builds upon it by breakdown these areas into subthemes that have not been specified for this population before and were not necessarily predicted by the researcher. The salience of time and stress management, more so than goal setting, for example, can be used to guide future programming for this student population.

Limitations

A possible threat to internal validity is the fact that three students dropped out of the treatment condition and only one dropped out of the control condition at the start of the study. That is, those who ultimately remained in the treatment and control groups may have then differed such that it influenced the outcome of the study. It is often expected, however, that more participants would drop out of the treatment condition on the basis that it is significantly more demanding than the control condition. Thus, the reason for the difference in dropout was likely the demands of the condition, not a particular quality of the student. Furthermore, analysis of pretest differences between the treatment and control group for each of the three dependent variables lent further support to this idea, as the treatment and control groups were not significantly different on growth mindset and sense of belonging measures at pre-test. While the groups differed significantly on self-management at pre-test, no preliminary conclusions about

the effect of the intervention on self-management were made as a result. Finally, given that the students dropped out before completing any measures, it appears unlikely that this small difference in dropout rate impacted internal validity.

A second limitation is the fact that the sample was overwhelmingly female, and thus the results of this study may not be representative of the male Hispanic/Latino college student perspective. 78.4% of study participants were female and 21.6% male. This figure, however, is not too far removed from the national gender distribution of college Hispanic/Latino students. In 2014, Hispanic/Latino males were 43% of the college population and females 57%. Furthermore, 60% of bachelor's degrees awarded to Hispanic/Latinos were to females (U.S. Department of Education, National Center for Education Statistics, 2015). The researcher also made an effort to include males as interviewees in the intensive one-on-one interviews. Thus, two of the six participants interviewed were male. Taking such steps assisted in ensuring that Hispanic/Latino male perspective was captured in the qualitative data. The fact that these two students tended to emphasize similar themes to their female counterparts offers encouragement that the results of this study are representative of both males and females, but further study with a larger sample of males is recommended.

Another limitation of the study is that long-term outcomes were not measured. That is, in developing a program that ultimately aims to improve indicators of college success, the study did not measure indicators such as academic grade point average, college persistence and graduation rates, overall satisfaction with the college experience, or decreased stress and mental health symptoms. While the literature is clear that sense of belonging is a promotive factor for Hispanic/Latino students, this study did not investigate whether the sense of belonging gains found will indeed translate to better outcomes on such indicators of college success. While this

study cannot draw direct conclusions about such variables, such research questions were not within the scope of this study, as intervention research protocol dictates that validation of core components is necessary before beginning efficacy testing (Fraser and Galinsky, 2010).

Intervention research protocol indicates that program effects are not necessarily measured until the subsequent efficacy phase. This study thus undertook the task of measuring preliminary effects with the goal of analyzing and refining the measurement process so it can be more effective during subsequent efficacy testing, during which time there must be more participants to generate statistical power. At that time, a study can investigate both more immediate program effects such as a change in SEL skills and longer-term effects such as graduation rates and mental health symptoms.

A possible threat to external validity is the possibility that UNC, with its uniquely high graduation and retention rates and strong school commitment, is an inherently different environment and therefore the results of this study may not generalize well to other college settings. It is possible that the students who attend UNC, given the rigorous admission standards, have achieved academic success thus far because they also already possess stronger SEL skills or greater motivation than students admitted to many other universities. Thus, UNC students may require a different level of SEL skill building or be more motivated to participate in such a program when compared to students at other universities. It is encouraging, however, that the core constructs of sense of belonging, self-management, and growth mindset align with research done across other institutions regarding promotive factors for Hispanic/Latino students. Furthermore, the preliminary study from which this program was developed investigated core constructs across several different universities, including UNC, through focus groups with students of diverse racial and ethnic backgrounds. Students across the universities endorsed the

three core SEL constructs. This also suggests that the core content would likely be relevant for Hispanic/Latino students at other universities, even though the types of discussions students might have around these components may differ based on their setting. It is also possible that aspects of feasibility and program acceptability may differ at other universities. Furthermore, scaling up to other settings to test for program effectiveness is typically conducted in a later phase of intervention research. At this time, the effectiveness of the intervention at other universities would be analyzed, and the Plan-Do-Study-Act cycle could be used to modify implementation for the program to fit the needs at another university (Blase & Fixsen, 2013; Fraser and Galinsky, 2010). Therefore, the generalization of the program to other settings represents a longer-term step to be taken in building off of this investigation.

With regard to measurement, a limitation around social desirability arose. That is, the collection of data relied on post-program surveys and interviews completed by the participants rather than more objective measures (e.g. grade point average, retention rates). Particularly after developing a relationship with the program facilitator, who was also the researcher, it is possible that students somewhat positively skewed their responses so as not to offend the facilitator. Steps were taken to try to reduce the likelihood that this would occur. For example, both in person and at the start of online surveys, the students were encouraged to respond honestly so that the program could be improved for future students. They were also reminded that their survey responses would not be linked with their name. Triangulation of data sources also suggested that students were responding consistently across their interviews and post-program surveys. In person interviews with the researcher seemed particularly vulnerable to the social desirability effect, given that the interviewer also implemented the group. The fact that interview

results reflected the more anonymous feasibility questionnaire results is a positive indicator that students responded fairly honestly.

The most significant limitation of the study centers on the use of the SEL surveys as indicators of student skills in these areas. Only the sense of belonging instrument had been validated with a substantial number of Hispanic/Latino students, whereas the self-management and growth mindset measures had been validated with college students but these studies did not include a substantive Hispanic/Latino population (Button et al., 1996; Dweck, 1999; Furnham, 2014, Hollenbeck et al., 1989; Walton & Cohen, 2007). The self-management tool was selected because it measured goal orientation and commitment, skills that were taught in the SEL program. In retrospect, however, the self-management instrument does not appear to capture the range of attitudes toward goal setting that were highlighted by the qualitative data. This is evidenced by the fact that students' self-management scores were somewhat clustered at the upper end of the scale, suggesting a possible ceiling effect in that participants already possessed high skills in these areas. Closer analysis of items on the questionnaires indicates that goal commitment items such as, "Quite frankly, I don't care if I achieve my college goals or not" may not be nuanced enough to represent student attitudes toward goals. Unsurprisingly, students almost overwhelmingly responded to such items with "disagree" or "strongly disagree". In particular, these items do not seem to reflect the typical UNC student who has likely put forth significant effort toward goals in the past in order to be admitted to the university. While many of the goal orientation items were more nuanced, it is possible that such limitations affected the ability to accurately measure change in self-management as a result of the intervention. Thus, it would be more meaningful to create and validate new questionnaires in these areas that more

directly capture the SEL constructs that the intervention is attempting to change. Close attention should be paid to ensuring that there is an adequate ceiling on the self-management measure.

A statistical limitation in determining preliminary outcomes of the intervention was the small sample size, as it limited the power to detect anything but the strongest effects. Knowing that the sample size would limit the ability to detect differences between pre- and posttest, inclusion of this research question was worthwhile in that significant differences were detected in sense of belonging even with the small sample size. The inclusion of the preliminary outcome analyses also provided a forum for testing the utility of existing questionnaires with this population. Gathering such information can be used to make improvements in methodology during efficacy testing, the next step in the intervention research protocol. Furthermore, the small sample size did not affect the ability of the study to gather information about intervention feasibility and usability, which was the primary goal of the study.

A related limitation involves the possibility that the small sample size contributed to the significant differences between the control and treatment groups on the self-management pretest. The smaller the sample, the greater the likelihood that differences that occur by chance will present as statistically meaningful differences. A larger group size for each of the conditions would have increased the likelihood that individual differences would average out such that there would not be statistically significant differences between the groups at pretest. Given the limitations associated with small sample size, it would be beneficial for future efficacy testing to ensure that sample size for the treatment and control groups is sufficiently large so as to avoid such problems and also provide sufficient power to detect effects of the intervention.

Implications and Future Directions

This study highlights the need for college programming that brings together freshmen and/or sophomore Hispanic/Latino students in such a way that they begin to develop a support network. Furthermore, it seems that the opportunity to explicitly discuss issues of adjustment to college that are common to all college students and unique to this population is viewed as highly beneficial. The opportunity to do this in a small group setting, in which ongoing relationships can be formed with Hispanic/Latino peers, is critical. It may also be of utility for colleges to facilitate connections between Hispanic/Latino students who are international students, as this study suggests these students do not always feel that their peers raised in the U.S. fully understand their perspective.

In developing such a college program for Hispanic/Latino students, results support the inclusion of sense of belonging, self-management, and growth mindset as core constructs but suggest that some changes to implementation factors and study methodology should be considered. This study extends SEL programming to the college level, suggesting that implementation of such programs is feasible and acceptable. To date, most programs at the college level have targeted academic skills or isolated SEL skills (Adams & Proctor, 2010; Strayhorn, 2011). Freshmen seminar courses are increasingly incorporating non-cognitive skills such as growth mindset and stress management in a for-credit classroom setting (Jessup-Anger, 2011; Keup & Barefoot, 2005). While the SEL program under investigation covers similar topics, it differs in that it is implemented in a small group counseling setting rather than a classroom, an aspect of the program that students repeatedly cited as positively promoting sense of belonging. It also builds upon limited prior work (Castro-Olivo, 2014) that shows that SEL interventions specifically dedicated to Hispanic/Latino adolescents and young adults can be

feasible and acceptable. At UNC in particular, these results suggest that this program provides a unique support in that many other Hispanic/Latino events, particularly at the start of freshmen year, are large events that may offer less opportunity to intimately get to know peers of the same cultural background. It also offers a supplement to the Hispanic/Latino mentoring program at UNC, which students expressed was helpful for guidance in terms of navigating the campus environment, but less helpful in meeting and hearing the perspectives of their peers.

Preliminary results suggest that this program may support the resiliency of these students, particularly their sense of belonging at a large university. Further exploration of this topic is warranted given the relatively high levels of stress and social emotional challenges reported by college students at UNC, as well as the disparities at other universities between Hispanic/Latino persistence rates versus other populations (American College Health Association, 2010 & 2013; Hawley & Harris, 2005; Petty 2014). Therefore, the next step in the intervention research protocol is to test for program efficacy with a larger sample size. In subsequent research undertaking this goal, results of this study can be used to guide content, implementation, and methodology.

Results of the present study indicate that some changes could be useful in informing future research on the development of SEL programs for Hispanic/Latino college students. Results suggest that sense of belonging should be preserved as a core construct, as should the small group format and the exclusively Hispanic/Latino nature of the group. Results also indicate that extending the length of the program to include several more sessions could bolster sense of belonging further, as could opportunities for program participants to meet outside of the group to complete activities. With regard to the first session content and the feedback that this was the least useful session, it may be helpful to decrease the emphasis on providing a message

to incoming freshmen and increase the discussions about the students' own experience with social adversity. This may not necessarily be warranted, however, since several students reported liking this session least because they dislike icebreakers. Given that the goal of the session was to help students internalize the message that social adversity is shared, a better next step might be to directly measure whether this was accomplished by including it as an item on the SEL questionnaires, rather than changing the session.

Results also support the retention of the growth mindset and self-management content in future studies of such SEL programming with the Hispanic/Latino population. While goal setting did not emerge as a salient theme when students discussed factors for college success, continued inclusion of this session appears to be beneficial given that the majority of students indicated that it was their favorite. Furthermore, analysis of their responses indicated that students cite goal setting as a method of helping them prioritize, which taps into the subtheme of time management. Thus, a response to the student input to increase program length could come in the form of additional sessions that address time management and stress management. In lengthening the program, it may be useful to create the additional sessions as optional modules that can be added based on group preferences. Given the emphasis students placed on the building of the peer bonds over the four sessions, it is worth exploring whether lengthening the program would lead to more meaningful increases in sense of belonging. Another possible way to lengthen the program, suggested by several students, is to separate the introductory initial session from the sense of belonging session on shared social adversity. It is also worth investigating whether additional sessions focusing on time and stress management, factors emphasized by students as critical to success at UNC, would lead to gains in self-management. Other considerations for program extension include the development of a session that helps

students with applying the growth mindset skills, given that several interviewees expressed that they are working on reframing such thoughts but find it difficult. The use of modules that can be added as needed could also be useful in generalizing the program to other university settings, allowing the program to be tailored to a particular group of students. Given that the core constructs supported in this study are the same as those identified in the prior feasibility and acceptability study conducted with the broader UNC freshmen and sophomore student population, future research may also want to examine whether this program would support groups of students other than Hispanic/Latino students.

With regard to future considerations for generalizing such an SEL program to other college populations, key implementation ingredients to consider are the small group format and the exclusively Hispanic/Latino nature of the program, with a program length sufficient for the students to develop meaningful relationships. Given that prior research shows that such small group settings are a natural setting for the formation of informal mentoring relationships, program implementers may want to consider implementing this program with the use of Hispanic/Latino upperclassmen facilitators (Upcraft & Gardner, 1989). This would satisfy the students' expressed desire for guidance from older individuals who have taken the same path. While the program facilitator in this investigation was able to speak to her college experience at a different university, it would likely be more meaningful for an upperclassman only a few years removed from these students to serve in this role. This would entail providing appropriate training in conducting small group facilitation, SEL background knowledge, and mentoring. Prior to consideration of generalization and program dissemination, however, the next step is testing the efficacy of the small group program with the four core sessions and three or four new sessions added based on the results of this study.

Overall, next steps should involve testing of a program that centers on the three constructs highlighted by this study, but it would be beneficial to expand upon each of them by adding further sessions. This would serve the dual goal of lengthening the program in response to student feedback, as well as addressing the additional curriculum that was highlighted by the qualitative student responses. Therefore, more sessions on growth mindset may be useful in reiterating what students described as the most complex topic to understand. Another session might center on having students practice combating fixed mindset thoughts by changing them to thoughts in line with a growth mindset. Additionally, sessions targeting time management and stress management should be added. With the separation of the first session into two sessions that separately serve as an icebreaker session and then a session on shared social adversity (a sense of belonging session), at least 8 sessions are recommended. A ninth session specifically discussing racial issues pertinent to the Hispanic/Latino population could also be added. In delivering this program, it is important that it continue to be delivered on campus at a convenient location and that a food incentive be offered for participation. The results of the current study suggest that with such changes, future investigation of the outcomes of such a program may be even more robust than those found in this study.

In taking the next step by efficacy testing, future research in the area of SEL programming for Hispanic/Latino college students could also benefit from methodological changes that address the described study limitations. First, it will be critical to have a substantially larger sample size such that the study has the power to test for meaningful effects of the intervention. This would also reduce the likelihood that treatment and control groups would be dissimilar on SEL variables at pretesting, as occurred with the self-management variable in

this study. A larger sample size also might shed light on whether the program influences changes in growth mindset.

Also critical to measuring these effects is modification of the instruments used to measure the three SEL variables in this study. This should involve the validation of all three SEL measures with the Hispanic/Latino population before conducting the efficacy study. Prior to this, however, researcher should consider modifying the self-management questionnaire to better reflect the skills being taught. For example, since the goal setting session focuses on teaching students to break goals into sub-goals and to prepare in advance for possible obstacles that might prevent them reaching the goal, new questionnaire items could be developed around these skills. Furthermore, if stress management and time management sessions are added, additional questionnaire items around these skills can be drawn from prior literature or developed anew based on session content. It will be of utmost importance that the self-management questionnaire better reflect the session content. With regard to growth mindset, the questionnaire may also benefit from modification, given that it includes only three questions. It may be useful to include a measure more specific to perseverance, as this emerged as a key related variable under the growth mindset umbrella. In the area of sense of belonging, the inclusion of measurement of student beliefs around social adversity as a shared experience would be a useful measure of how well they have internalized the message of the first program session. Thus, before scaling up the program for efficacy testing, piloting tweaked measures with a subset of the intended student population will be important to ensure that it is valid. This is important given that the growth mindset and self-management measures were validated on samples that included Hispanic students but not in large enough number to be sure that these measures are indeed valid for this group.

Conclusion

Overall, this investigation of treatment feasibility and acceptability supported the inclusion of the core constructs of sense of belonging, self-management, and growth mindset in a SEL program for Hispanic/Latino college students. Quantitative analysis also suggested that the SEL intervention led to gains in sense of belonging for those who participated. Implementation keys to this process were the small group format and a group program long enough for students to develop sufficient bonds, as well as the provision of food during group sessions to motivate students to attend. Future research on this SEL program might consider including sessions addressing time and stress management, further exploration of growth mindset, or an introductory session that stands alone. Additionally, in taking next steps to test the efficacy of this program, it will be key to use a larger sample size so as to have sufficient power to detect effects, particularly in determining whether the program influences students' self-management and growth mindset. This study also indicated that changes to the measurement of program effects should be undertaken in future work, including validation of SEL questionnaires with the Hispanic/Latino population before beginning the intervention program. Overall, this study extends prior work by highlighting that sense of belonging, self-management and growth mindset are key promotive factors for the Hispanic/Latino college population at a PWI. This study also extended the implementation of SEL programming typically undertaken at the K-12 level to the college level. It provided preliminary indicators that a small group packaging of SEL skill instruction, tailored to the needs of the population, may be beneficial in promoting resiliency. Given that social or emotional factors are often the reason that college students do not persist, it is worth furthering the research-based programming in this area, with a particular focus on bolstering the college success of the ever-growing Hispanic/Latino population.

APPENDIX A: TABLES

Table 1. Definitions of Core Components

Table 2. Sequence of Sessions

Table 4. Method of Data Analysis

Table 6. Comparing Demographics Across Treatment and Control: Descriptive Statistics and t-Tests of Independence

Table 7. Comparing Demographics Across Treatment and Control: Pearson Chi Square and Fisher's Exact Tests of Independence

Table 8. Comparing University Services Accessed Across Treatment and Control: Pearson Chi Square and Fisher's Tests of Independence

Table 9. Program Acceptability and Feasibility: Descriptive Statistics and Frequencies

Table 11. Homogeneity of Variance: Levene's Test for Equality of Variances

Table 1. Definitions of Core Components

Core Component	Definition
Growth Mindset	A student's belief that performance can be improved with effort and learning. This is the opposite of a mindset in which the student believes that his or her performance is "fixed" based on his or her intelligence.
Sense of Belonging	A student's feeling that he or is a part of the university community and that he or she belongs there. This includes a sense of fellowship with peers and teachers.
Self-Management	A student's ability to make effective choices and decisions about their life, free of outside influences or distractions. This includes time management, goal setting, motivation, and managing stress and emotions.

Table 2. Sequence of SEL Program Sessions

<i>Week</i>	<i>Session Title</i>
1	Sense of Belonging: Social Connectedness
2	Growth Mindset: Malleability of Intelligence
3	Self-Management: Goal Setting
4	Sense of Belonging: Value Affirmation

Table 4. Method of Data Analysis

Question	Dependent Variable	Measure	Group	Timing	Method of Analysis
1. Do students who participated in the SEL program show significantly greater gains in SEL skills than their peers in the control group?	Growth Mindset	Relevant items on SEL Questionnaire	Treatment & Control	Pre-test & Posttest	2-way Repeated Measures ANOVA
	Self-Management	Relevant items on SEL Questionnaire	Treatment & Control	Pre-test & Posttest	2-way Repeated Measures ANOVA
	Sense of Belonging	Relevant items on SEL Questionnaire	Treatment & Control	Pre-test & Posttest	2-way Repeated Measures ANOVA
2. What is the usability and feasibility of the SEL program in the residential life context?	N/A	Feasibility Questionnaire	Treatment Group only	Posttest Only	Qualitative coding, Criterion-referenced cutoff score
	N/A	6 Intensive Interviews	Treatment & Control	Posttest Only	Qualitative Coding

Table 6. Comparing Demographics Across Treatment and Control: Descriptive Statistics and t-Tests of Independence

Demographic Variable	Treatment		Control		Total		<i>df</i>	<i>t</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Credits Accrued	34.83	20.59	28.43	19.58	31.31	20.08	49	-1.14	.26
High School GPA	4.34	.53	4.31	.41	4.32	.46	49	-.21	.83
Age	18.65	.65	18.50	.69	18.57	.67	49	-.80	.43

Table 7. Comparing Demographics Across Treatment and Control: Pearson Chi Square (X^2) and Fisher's Exact Tests of Independence

Demographic Variable	X^2	p	Fisher's Test p
Gender	-	-	.51
Year in College	1.40	.24	-
Born in the U.S.	.69	.41	-
Parents Born in Mexico	3.96	.047*	-
Bilingual	-	-	1.00
Held a Job in College	.83	.36	-
First Generation College Student	2.76	.10	-
Receiving Need-Based Financial Assistance	-	-	1.00

*Significant at the $p < .05$ level

Table 8. Comparing University Services Accessed Across Treatment and Control: Pearson Chi Square (X^2) and Fisher's Exact Tests of Independence

Program/Service	Treatment ($n=23$)	Control ($n=28$)	X^2	p	Fisher's Test p
Academic Advising	17	25	-	-	.27
Carolina Latino Collaborative	11	24	8.42	.00*	-
Learning Center	12	19	1.30	.25	-
Writing Center	11	19	2.09	.15	-
Office of Scholarship & Student Aid	14	18	.06	.80	-
Campus Health	14	17	.00	.99	-
Math Help Center	4	7	-	-	.73
Office of Diversity & Multicultural Affairs	5	5	-	-	.74
Student Wellness	7	4	-	-	.19
Honors Carolina	1	3	-	-	.62
Carolina Women's Center	2	3	-	-	1.00
Center for Student Success & Academic Counseling	3	2	-	-	.65
Accessibility Resources & Services	2	1	-	-	.58

*Significant at the $p < .05$ level

Table 9. Program Acceptability and Feasibility: Descriptive Statistics and Frequencies

Question	<i>M</i>	<i>SD</i>	Number Responding “Somewhat Agree” or “Strongly Agree” (%) <i>n</i> =23
I am happy that I participated in this program.	3.91	.288	23 (100%)
I learned new skills from this program.	3.22	.850	19 (82.6%)
My participation in this program will help me be a more successful college student.	3.30	.703	20 (86%)
As a result of this program, I feel more supported by others at my university.	3.26	.689	20 (86%)
The program content was relevant to my life.	3.74	.449	23 (100%)
The skills discussed in the group sessions are important for college students to have.	3.70	.470	23 (100%)
The concepts presented in the program were explained clearly.	3.74	.689	22 (95.7%)
The program was well organized	3.65	.647	21 (91.3%)
The group leader was engaging.	3.78	.518	22 (95.7%)
I felt comfortable sharing my thoughts during the group sessions.	3.87	.344	23 (100%)
The groups were held in a convenient location.	3.74	.449	23 (100%)
Question	Number of Students Who Responded “Yes” (%) <i>n</i> =23		
Would you recommend this program to UNC first year students?	23 (100%)		
The format of this program made it easy for me to participate.	23 (100%)		
The fall semester was a good time of year for this program.	22 (95.7%)		
50 minutes was the right length of time for each group session.	22 (95.7%)		
Four group sessions was the right number of sessions to cover the content.	19 (82.6%)		
Question	Good Balance	Too much discussion	Too much hands-on activity
How do you feel about the balance between discussion and hands-on activities?	20 (87%)	0	3 (13%)

Table 11. Homogeneity of Variance: Levene's Test for Equality of Variances

Dependent Variable		<i>F</i>	<i>p</i>
Self- Management	Pretest	3.84	.06
	Posttest	.39	.54
	Change	2.09	.15
Growth Mindset	Pretest	.85	.36
	Posttest	.00	.99
	Change	.000	.10
Sense of Belonging	Pretest	.02	.88
	Posttest	.10	.32
	Change	.21	.65

APPENDIX B: FIGURES

Figure 1. Conceptual Relationships in SEL & Resiliency

Figure 2. Problem Theory

Figure 3. Theory of Change

Figure 4. Logic Model

Figure 5. Research Design

Figure 1. Conceptual Relationships in SEL & Resiliency

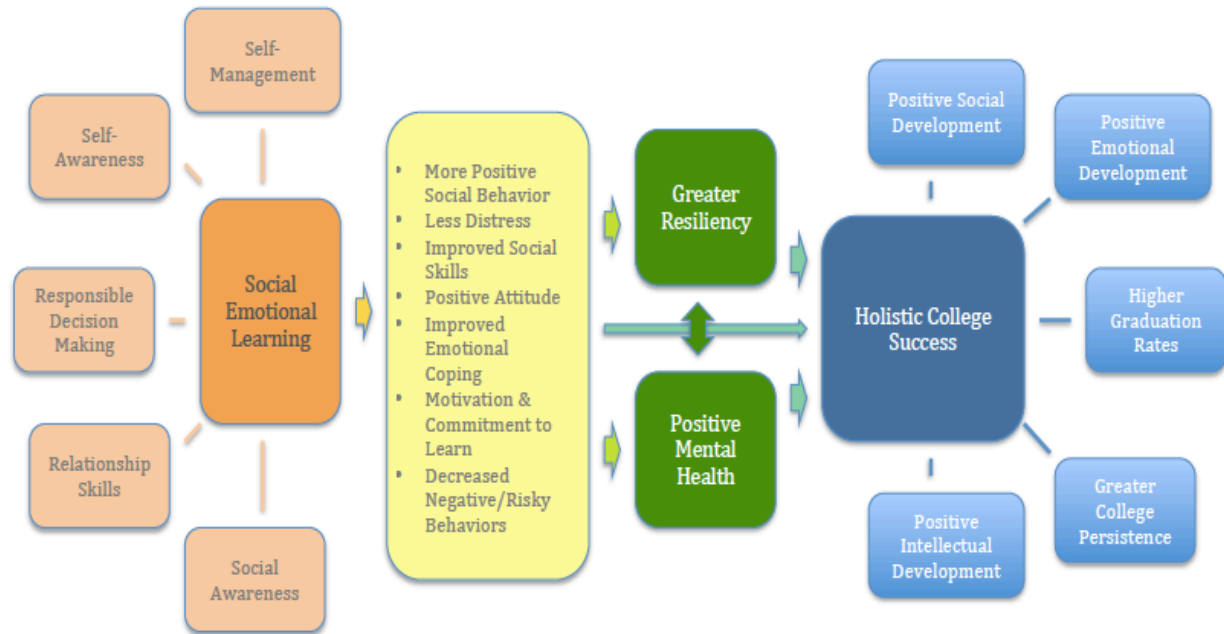


Figure 2. Problem Theory

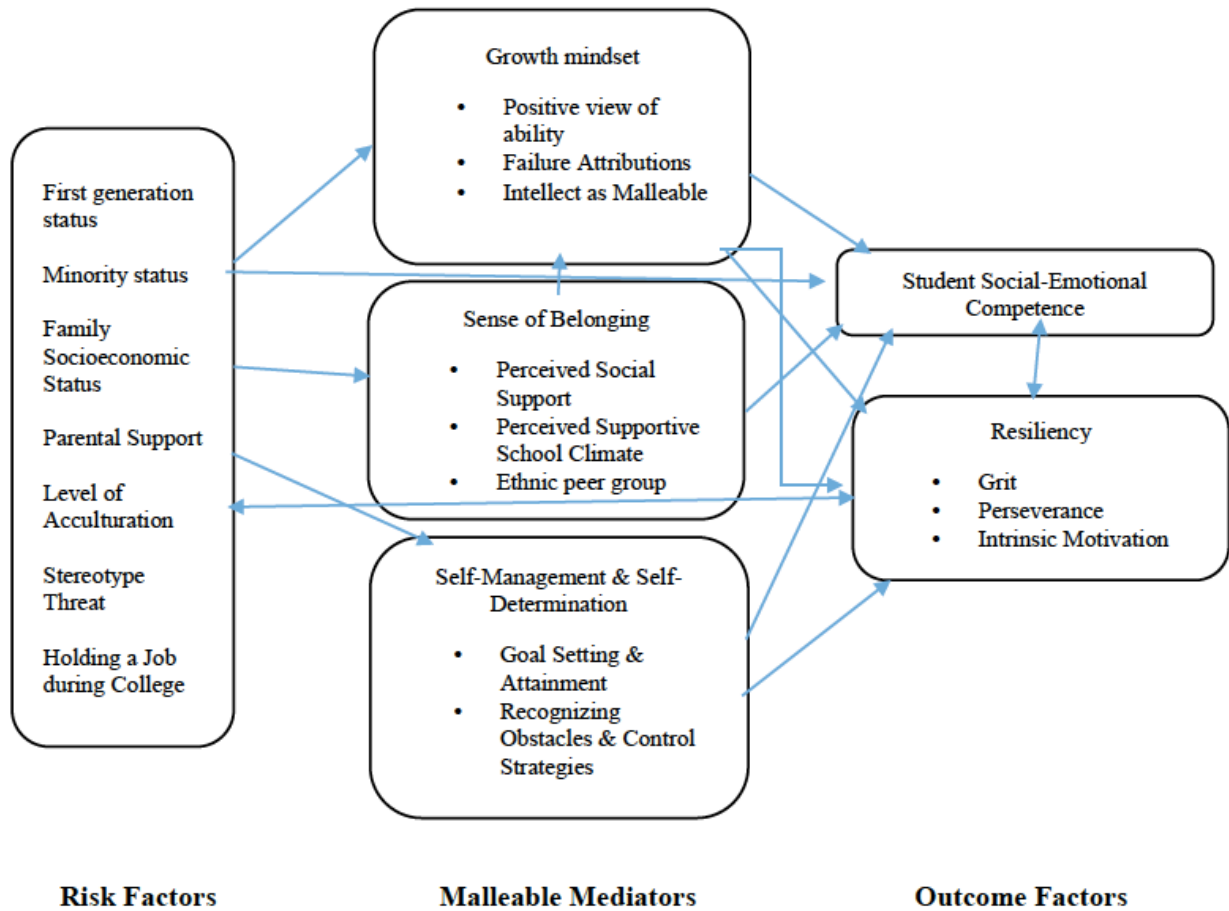


Figure 3: Hispanic/Latino SEL Program Theory of Change

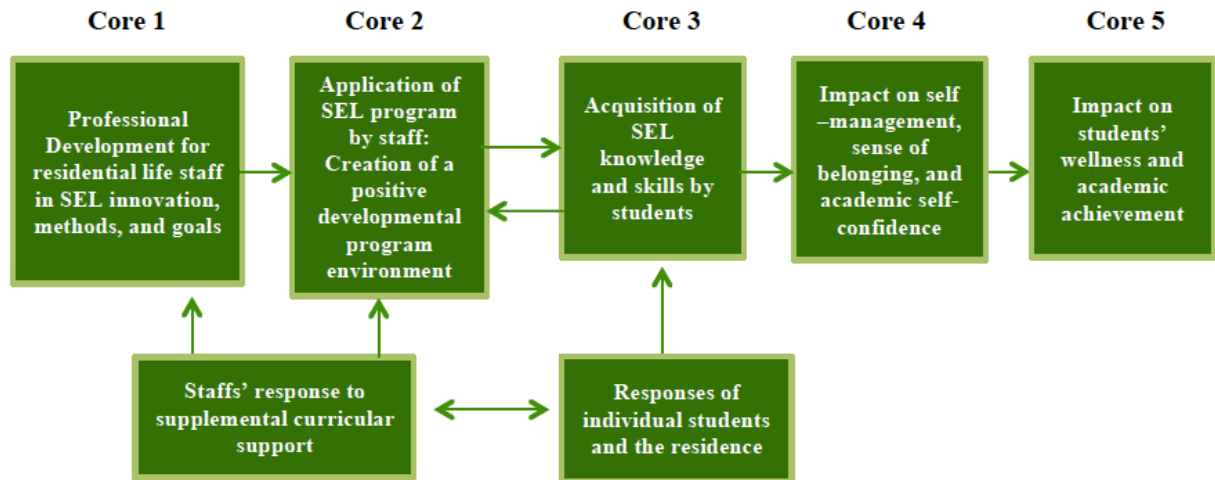
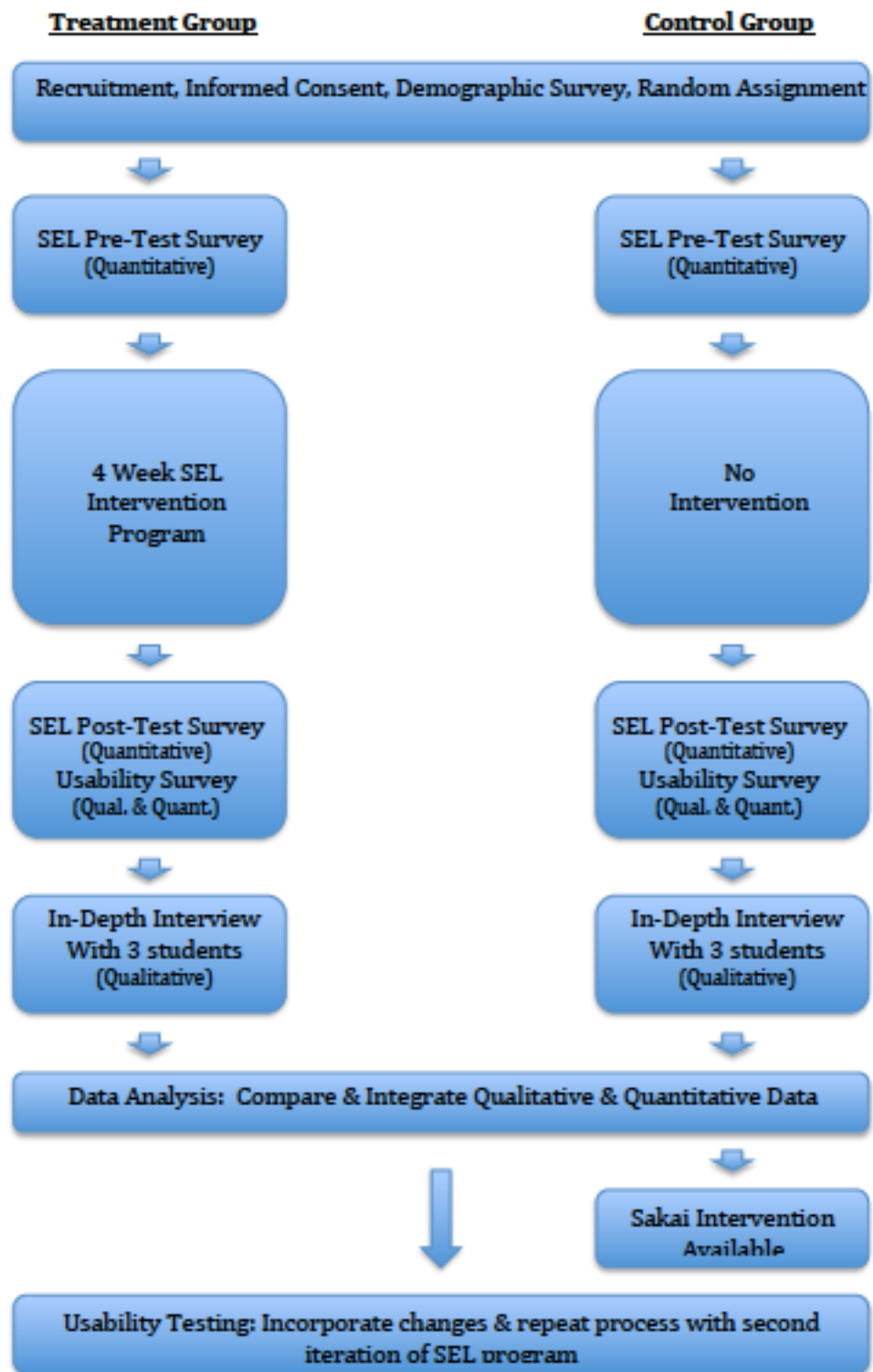


Figure 4: Hispanic/Latino SEL Program Logic Model

Objectives	Inputs/Investments	Outputs: Activities	Output: Participation	Outcomes: Proximal	Outcomes: Distal
<ul style="list-style-type: none"> Enhance protective skills of sense of belonging, self-management, and academic self-confidence Build resiliency through social emotional learning Improve outcomes for first year Hispanic students 	<ul style="list-style-type: none"> Staff with availability and skills needed to deliver program Professional development for program facilitators Research base to guide program SEL curricula tailored to Hispanic students Funding for program staff, incentives to participate, and materials for sessions Facilities in which to deliver program 	<ul style="list-style-type: none"> Training for group facilitators Skill development for students 	<ul style="list-style-type: none"> Trained group facilitators Freshmen, Sophomore students living on campuses 	<ul style="list-style-type: none"> Changes in understanding of students social emotional needs Enhanced SEL skills (sense of belonging, self-management, and academic self-confidence) in Hispanic college students Changes in the way the university supports first-year students. 	<ul style="list-style-type: none"> Improved academic outcomes for Hispanic students Enhanced student social and emotional learning and well-being Continuous promotion of personal and social competencies of students

Figure 5. Research Design



APPENDIX C: RECRUITMENT FLYER

VOLUNTEERS WANTED FOR A RESEARCH STUDY!



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Developing a Student Success Program at UNC

The purpose of this study is to examine the usefulness of a social and emotional skill-building program with UNC Hispanic/Latino students.

To participate, you must be 18 years old and a Hispanic/Latino first- or second-year student at UNC-CH

Participation involves:

- Complete 2 short surveys
- Participate in a 4-week skill-building program with peers: weekly group sessions are 50 minutes of hands-on activities & discussion

Benefits include:

- Be part of developing a program for undergraduates
- Hone skills for approaching obstacles & working toward college goals
- Earn \$30 for completing both surveys + extra \$20 for attending all 4 sessions
- Pizza served at all group sessions

Come to an information session: date/time@ location!

This research is conducted under the direction of Dr. Steve Knotek, UNC School of Education.

Participation is completely voluntary. (IRB number #16-1767)

Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu	Student Success Info Session: place @ time ericaf@ad.unc.edu
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APPENDIX D: INFORMED CONSENT FORM

University of North Carolina at Chapel Hill Consent to Participate in a Research Study Adult Participants

Consent Form Version Date: 6/22/16

IRB Study #16-1767

Title of Study: Promoting Hispanic/Latino Undergraduate Success Through Social Emotional Learning

Principal Investigator: Erica Fornaris

Principal Investigator Department: School of Education Deans Office

Principal Investigator Phone number: (804) 683-0064

Principal Investigator Email Address: erica.fornaris@cidd.unc.edu

Faculty Advisor: Steven Knotek

Faculty Advisor Contact Information: (919) 843-2049

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary.

You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to examine the usefulness of an undergraduate student success program for Hispanic/Latino students. This student success program was initially developed for all undergraduate students but has been tailored to meet the needs of Hispanic/Latino students. During the program, you will have opportunities to discuss your college experience. You will also learn strategies for approaching obstacles, working toward reaching their goals, and adopting a proactive mindset. Research shows that student mindset can impact the way students approach their goals and the challenges they face, whether those challenges are social or academic. It is believed that students who develop such skills are more likely to graduate from college and express satisfaction with their college experience.

The study aims to determine whether students perceive the program as useful and whether the program produces changes in student mindset. This will be accomplished by gathering feedback from students through online surveys and in-person interviews.

You are being selected as a possible participant because you have self-identified as a Hispanic/Latino undergraduate student at the University of North Carolina at Chapel Hill.

Are there any reasons you should not be in this study?

You should not be in this study if you have not yet turned 18 years old or are not a UNC-CH first- or second-year Hispanic/Latino student.

How many people will take part in this study?

A total of 80 participants are expected to take part in this research study.

How long will your part in this study last?

Participation in this study will last for 5 to 7 weeks. You can expect to spend 10-20 minutes completing each of the two online surveys. If you are assigned to the face-to-face program, you will also attend four 50-minute group sessions. If you are invited to participate in a post-program interview, that will last for about 45 minutes.

What will happen if you take part in the study?

If you agree to participate in this research study, you will go through three stages of the program.

Stage 1 – Pretesting

You will complete the first set of questionnaires. This includes a “Demographic Survey” form that gathers information about your background, including academic information, languages spoken, and other programs in which you participate. You will also complete a questionnaire that will explore your thoughts about social and emotional factors that influence college success. These questionnaires are expected to take a total of 10 – 20 minutes to complete. You are free to decide not to answer a question for any reason.

Stage 2 – Intervention

Following the pretesting period, you will be assigned by chance (i.e. like flipping a coin) to either the face-to-face program or the Sakai online program. If you are assigned to the face-to-face program, you will participate in 4 weekly group sessions that will be held on the UNC campus. These program sessions will be 50 minutes each and will consist of 9-11 other undergraduate students. They will include hands-on activities and discussions about the college experience. Alternatively, if you are assigned to the Sakai group, you will be provided online access to the same 4-week curriculum. In this version, you can access the curriculum when you choose and there are no required activities. The Sakai curriculum will become available after post-testing (stage 3).

Stage 3 – Post-testing

After the four-week intervention period, you will be asked to complete a second set of questionnaires, which will take about 10-20 minutes. You will re-take the initial questionnaire regarding attitudes toward non-academic factors. If you were assigned to the face-to-face program, you will also complete a survey providing feedback about the program. Again, you are free to decide not to answer a question for any reason. After this, you may be asked to volunteer to participate in a one-on-one interview with the investigator about your experiences with the program. Like all other portions of the study, this is voluntary.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. The benefits to you from being in this study may be:

- The opportunity to discuss the college experience with peers and learn skills designed to help you be successful in navigating college life and demands

- The opportunity to connect with other UNC students in a group setting that promotes open conversation and peer support
- The opportunity to help investigators understand the strengths and weaknesses of the program and improve it for future students.

What are the possible risks or discomforts involved from being in this study?

The foreseeable risks associated with this study are believed to be minimal, but there may be uncommon or previously unknown risks. You should report any problems to the researcher.

Participant discussions among peers will be used in the study, although names will not be reported. It is possible although unlikely that you could experience embarrassment or social consequences related to something you share in the face-to-face groups. You are free to share as much or as little information as you wish about your experiences. The group facilitator will work to promote an atmosphere of support and confidentiality amongst participants.

What if we learn about new findings or information during the study?

You will be given any new information gained during the course of the study that might affect your willingness to continue your participation.

How will information about you be protected?

Information shared on questionnaires or written documents will be kept confidential. For the purposes of this research study, your comments will not be anonymous given the nature of open discussions in the face-to-face sessions. Every effort will be made by the investigator to preserve your confidentiality.

- Students will be assigned alphanumeric identification codes that will be used in research notes and documents. The document linking student names with codes will be kept in a secure storage container.
- Notes with identifying participant information will be kept in a secure storage container and in the personal possession of the investigator.
- Participants will **not** be identified in any report or publication about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies (for example, the FDA) for purposes such as quality control or safety.

What if you want to stop before your part in the study is complete?

You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because the entire study has been stopped.

Will you receive anything for being in this study?

You will receive a \$15 gift card for completing the first set of questionnaires and a \$15 gift card for completing the second set of questionnaires. If you withdraw after completing the questionnaires you will still receive the amount of money corresponding with the questionnaires you completed (\$30 for both, \$15 for the first). Participants who are randomly assigned to participate in the face-to-face group sessions will also be provided pizza during the sessions.

Participants who are randomly assigned to the face-to-face group sessions will also receive an extra \$20 if they attend all four face-to-face sessions.

Will it cost you anything to be in this study?

It will not cost you anything to be in this study.

What if you are a UNC student?

You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or grades at UNC-Chapel Hill. You will not be offered or receive any special consideration if you take part in this research.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions about the study (including payments), complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

Signature of Research Participant

Date

Printed Name of Research Participant

Signature of Research Team Member Obtaining Consent

Date

Printed Name of Research Team Member Obtaining Consent

(See communication consent on the following page.)

CONSENT FOR CONTACT THROUGH PHONE OR EMAIL

Each week, the investigator will send two brief text or email messages that will remind participants of weekly program sessions. Participants who do not wish to receive reminders are eligible to participate in the study. Please indicate your preference below (choose one).

_____ Send reminders through text messages. I understand my carrier may charge me for each message.

My mobile phone number is _____.

_____ I would like to receive the reminders through email.

My UNC email address is _____.

_____ I **DO NOT** wish to receive reminders during the intervention phase.

APPENDIX E: ASSESSMENT INSTRUMENTS

[This questionnaire will be entered into Qualtrics and participants will take it online.]

Demographic Survey

Please answer the following questions. This information will be used to get a better understanding of the people in our study. The information you provide will not be examined individually, but as a part of a group of people being studied. All answers that you give will be confidential and only the investigator will have access to these questionnaires.

1. UNC-CH email address: _____ (Your email address will only be used to send you the questionnaires related to this study and will not be shared.)
2. Age: _____
3. Year in college: _____First _____Second _____Third _____Fourth _____Fifth or more
4. At the start of this semester, how many college credits had you earned? This includes credits from completed high school advanced placement (A.P.) courses, community college courses, and college courses. _____
4. Student status: _____Full-time student _____Part-time student
5. Gender: _____Male _____Female
6. Race (mark all that apply):
 - _____ American Indian
 - _____ Asian/Pacific Islander
 - _____ Black or African-American
 - _____ Caribbean American
 - _____ White
 - _____ Other (specify) _____
7. Do you consider yourself to be Hispanic/Latino? _____yes _____no
8. Were you born in the United States? _____Yes _____No
-If no, in what country were you born? _____
9. Were both of your parents born in the United States? _____Yes _____No

- If no, in what country or countries were your parents born? _____
10. Are you *conversationally fluent* in a language other than English? ___Yes ___No
 -If yes, which language(s)? _____.
11. What was your high school GPA? _____ (Enter number)
 -If your high school did not use GPA, please describe your high school grades:

12. Have you held a job while enrolled in college? ___Yes ___No
13. Do you currently work? ___Yes ___No
 -If yes, how many hours do you work each week? _____
14. Please mark the highest level of education completed by *either of your parents*:
 _____ Less than 9th grade
 _____ Some high school, but didn't finish
 _____ High school graduate or GED
 _____ High school plus some college or trade school
 _____ 2-year college degree
 _____ 4-year college degree
 _____ Graduate level study or degree(Master's, Doctorate, Professional Degree)
15. Are you receiving need-based financial assistance to attend UNC? _____yes
 _____no
16. Please mark all UNC offices or services you will access/utilize/participate in this semester:
- | | |
|--|--|
| Accessibility Resources & Service | Office of Diversity and Multicultural Affairs |
| Academic Advising Program | Office of Fraternity and Sorority Life and Community Involvement |
| American Indian Center | Ombuds Office |
| Campus Health Services | Scholarship & Student Aid |
| Carolina Latina/o Collaborative | Sonya Haynes Stone Center for Black Culture and History |
| Carolina Women's Center | Student Wellness |
| Center for Student Success and Academic Counseling | Undergraduate Retention |
| Equal Opportunity and Compliance Office | Veteran's affinity groups |
| Honors Carolina | Writing Center |
| International Student and Scholar Services | |
| Learning Center | |
| LGBTQ Center | |
| The Math Help Center | |
| Office of the Dean of Students | |

[This questionnaire will be entered into Qualtrics and participants will take it online. The questions from the three sections will be randomly interspersed and the participant will not see section headings other than "Questionnaire A"]

Questionnaire A

Participant # _____

Please mark how much you agree or disagree with each statement. Use the whole range of the scale.

Section 1: Self-management

The opportunity to do challenging work is important to me.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

When I fail to complete a difficult task, I plan to try harder the next time I work on it.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

I prefer to work on tasks that force me to learn new things.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

The opportunity to learn new things is important to me.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

I do my best when I'm working on a fairly difficult task.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

I try hard to improve on my past performance.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Slightly Agree Strongly
Disagree Disagree Disagree Agree Agree

The opportunity to extend the range of my abilities is important to me.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

When I have difficulty solving a problem, I enjoy trying different approaches to see which one will work.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

It's hard to take my goals for college seriously.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

Quite frankly, I don't care if I achieve my college goals or not.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

I am strongly committed to pursuing my college goals.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

It wouldn't take much to make me abandon my college goals.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

I think I have set good goals to aim for.

1-----2-----3-----4-----5-----6
Strongly Disagree Slightly Disagree Slightly Agree Strongly Agree

Sections 2: Mindset

You have a certain amount of intelligence, and you really can't do much to change it.

1-----2-----3-----4-----5-----6
Strongly Disagree Mostly Mostly Agree Strongly
Disagree Disagree Disagree Agree Agree

Your intelligence is something about you that you can't change very much.

1-----2-----3-----4-----5-----6
Strongly Disagree Mostly Mostly Agree Strongly
Disagree Disagree Disagree Agree Agree

You can learn new things, but you can't really change your basic intelligence.

1-----2-----3-----4-----5-----6
Strongly Disagree Mostly Mostly Agree Strongly
Disagree Disagree Disagree Agree Agree

Section 3: Belonging

People at UNC accept me.

1-----2-----3-----4-----5-----6
Strongly Disagree Moderately Moderately Agree Strongly
Disagree Disagree Agree Agree

I feel like I belong at UNC.

1-----2-----3-----4-----5-----6
Strongly Disagree Moderately Moderately Agree Strongly
Disagree Disagree Agree Agree

I feel like an outsider at UNC.

1-----2-----3-----4-----5-----6
Strongly Disagree Moderately Moderately Agree Strongly
Disagree Disagree Agree Agree

I feel comfortable at UNC.

1-----2-----3-----4-----5-----6
Strongly Disagree Moderately Moderately Agree Strongly
Disagree Disagree Agree Agree

People at UNC are a lot like me.

1-----	2-----	3-----	4-----	5-----	6-----
Strongly	Disagree	Moderately	Moderately	Agree	Strongly
Disagree		Disagree	Agree		Agree

I know what I need to do to succeed at UNC.

1-----	2-----	3-----	4-----	5-----	6-----
Strongly	Disagree	Moderately	Moderately	Agree	Strongly
Disagree		Disagree	Agree		Agree

I do not know what I would need to do to make a professor at UNC to like me.

1-----	2-----	3-----	4-----	5-----	6-----
Strongly	Disagree	Moderately	Moderately	Agree	Strongly
Disagree		Disagree	Agree		Agree

I am the kind of person that does well at UNC.

1-----	2-----	3-----	4-----	5-----	6-----
Strongly	Disagree	Moderately	Moderately	Agree	Strongly
Disagree		Disagree	Agree		Agree

If I wanted to, I could potentially do very well at UNC.

1-----	2-----	3-----	4-----	5-----	6-----
Strongly	Disagree	Moderately	Moderately	Agree	Strongly
Disagree		Disagree	Agree		Agree

Scoring:

Negatively worded responses will be reverse coded so that a high score on a given section of this measure is indicative of goal-oriented behavior, a 'growth' mindset, or a perceived sense of belonging.

Self-Management items were drawn from the Button, Mathieu, and Zajac's (1996) Learning Goal Orientation scale and the five-item version of the Goal Commitment Questionnaire (Hollenbeck, Williams, and Klein, 1989).

Button, S. B., Mathieu, J. E., & Zajac, D. M. (1996). Goal orientation in organizational research: A conceptual and empirical foundation. *Organizational Behavior and Human Decision Processes*, 67, 26-48.

Growth mindset items were drawn from Dweck's (1999) Mindset scale and

Dweck, C.S. (1999). *Self-Theories: Their role in motivation, personality, and development*. Philadelphia: Taylor and Francis/Psychology Press.

Sense of belonging: Shortened version of the Sense of Social and Academic Fit scale:

Walton, G.M. & Cohen, G.L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*, 92, 82-96.

[This questionnaire will be entered into Qualtrics and participants will take it online. During the post-test, these questions will be presented in the order that follows, after students take Questionnaire A.]

Questionnaire B: Participant # _____

Please answer these survey questions about your experience with participating in this program. Mark how much you agree or disagree with each statement. Please use the whole range of the scale.

Outcomes

I am happy that I participated in this program.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

I learned new skills from the program.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

My participation in this program will help me be a more successful college student.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

As a result of this program, I feel more supported by others at my university.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

Would you recommend this program to UNC first year students?

____ Yes
____ No

If no, why not?

Content

The program content was relevant to my life.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

The concepts presented in the program were explained clearly.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

The skills discussed in the group sessions are important for college students to have.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

Delivery

The groups were held in a location that was convenient for me.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

I felt comfortable sharing my thoughts during the group sessions.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

The group leader was engaging.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

The program was well organized.

1-----2-----3-----4
Strongly Somewhat Somewhat Strongly
Disagree Disagree Agree Agree

How did you feel about the balance between discussion and hands-on activities?

- ☐ Too much discussion and not enough hands-on activity
- ☐ Good balance of discussion and hands-on activities
- ☐ Too much hands-on activity and not enough discussion

The format of this program made it easy for me to participate.

- ☐ Yes
- ☐ No

The fall semester was a good time of year for this program.

- ☐ Yes
- ☐ No

50 minutes was the right length of time for each group session.

- ☐ Yes
- ☐ No

Four group sessions was the right number of sessions to cover the content.

- ☐ Yes
- ☐ No

Open-Ended Questions

1. Which sessions were most helpful to you? Why?
2. Which sessions were least helpful to you? Why?
3. What changes would you make to program content? Would you change, add, or remove any of the topics discussed?
4. What changes would you make to the program format? (This includes group location, number of sessions, time of year, group size, type of activities, etc.)
5. What might the group leader have done differently?
6. What can group leaders do to motivate future students to come to this group?

[The following questions will be asked of select participants in a one-on-one interview with the researcher.]

Interview Questions for Selected Participants

FACILITATOR SCRIPT: Turn on the recorder

Thanks for coming to talk with me today. Before we get started with the discussion, I want to tell you a bit more about what we are doing. We are gathering in-depth information from Hispanic/Latino students about different aspects of their experience with college, particularly the social and emotional aspects of being a college student. We are also gathering feedback from students about their participation in this program. We'll use this information to continue designing and improving a program to support student success.

I'm recording our conversation today so I can have it transcribed. We'll review the transcriptions to identify common themes and subthemes across students to find out how we can better support students. The information we learn will inform the development of our program and we may also summarize it for a research publication. Any reports or publications we write will not include your name or the name of your school. Do you have any questions about that?

Ok, let's get started.

1. Tell me about your experience as a college student at UNC.
2. What strengths do you think are important for success in college?
3. What challenges do you encounter as a college student?
4. What strategies, if any, do you feel are most helpful in supporting your success as a student?
5. What social and emotional skills do you believe that students need to be successful in college?

***GO TO QUESTION 6 FOR THOSE IN WHO PARTICIPATED IN THE TREATMENT GROUP.
GO TO QUESTION 12 FOR THOSE IN THE CONTROL GROUP.***

6. Tell me your initial thoughts about the student success program you participated in this fall.
7. What components of this program do you think would be most effective in supporting the needs of college students? Why?
8. What components do you think would be least effective, and why? How would you alter these components to be more effective?

9. How might you change the format of the group?
10. What would motivate students to participate in this program?
11. Is there anything else you would like to add?

Thanks so much for your time and your insights.

FOR THOSE IN WHO PARTICIPATED IN THE CONTROL GROUP ONLY:

12. So far, how has UNC provided opportunities for you to learn these skills?
13. Do you think universities should support students in learning these skills? If yes, how?
14. Is there anything else you would like to add?

Thanks so much for your time and your insights.

APPENDIX F: SEL INTERVENTION MANUAL

Summary of Core Sessions

Session 1: Introduction & Sense of Belonging

- Familiarize students with purpose of group and establish group norms
- Build rapport between group members through a short team building activity
- Students reflect on social changes associated with transition from high school to college
- Students read results of a survey of UNC upperclassmen, which emphasizes that almost all college freshmen experience social challenges at the beginning of college, but most students ultimately feel more comfortable and find close friends
- Students work in groups to develop a speech to be shared with incoming freshmen, with the goal of conveying that social adversity is universal and short-lived.

Session 2: Growth Mindset

- Students watch Eduardo Briceño's *Tedx Talk: The Power of Belief – Mindset & Success*
- Students reflect on the video and discuss a growth mindset versus a fixed mindset
- Students work in groups to write a letter to incoming freshmen emphasizing that intelligence is something that expands with hard work. The goal is to help the students internalize this message by personalizing it.

Session 3: Self-Management - Goal Setting

- Students briefly imagine and write about their ideal future five years from now
- The group discusses how setting goals can be motivating and helpful
- Students extract specific goals from their vision of their future, articulating in very specific terms what the goal is and why it is important to them
- Students work in pairs to identify sub-goals for their three most important goals, as well as to identify any potential barriers to reaching the goals and possible solutions.

Session 4: Sense of Belonging - Values Affirmation

- Students briefly reflect on the goals they set during the last session, thinking about how they will know when they've reached their goal and how it will feel.
- Students individually complete a values identification activity. From a list, they select and rank the values that are most important to them, stating why they chose those values.
- Students work with a partner to discuss the values they selected and discuss how their values might help them be successful in college and/or reach the goals they set.
- Students reconvene for a large group discussion of values and their role in the college experience.

Session 1: Introduction & Sense of Belonging
Skill: Social Connectedness

Objectives for Students:

- Develop a sense of social belonging within the group and university setting
- Set mutually agreed upon norms and goals for the group
- Foster an awareness of self in the context of a university setting
- Foster a connection between group members and peers on campus

Materials Needed:

- List of group norms
- Nametags
- Clipboards
- Pens/pencils
- Self-exploration handout
- “Results of Senior/Junior Survey” handout
- Speech Prompt handout
- Whiteboard or large paper and markers

Self-exploration Activity (5 minutes)

- Students are provided with a worksheet (*in Appendix*) to help them analyze their sense of connectedness to the community, peers, and faculty during the transition to college.

Purpose of Group, Norm Setting, and Introductions (15 minutes)

- 5 minutes: Facilitator explains that the purpose of the group is to support students in adjusting to college and developing the non-academic skills that are important to college, giving one or two examples (e.g. finding a group where you fit in socially, knowing there will be times that a test doesn’t go your way and picking yourself up to move on).
- Lay out the sessions and their overarching topic: 1) social experience, 2) mindset, 3) specific goals, and 4) values as individuals, Latino/a students, & UNC students.

- Facilitators guide the group in setting norms. Facilitator begins by establishing confidentiality of group discussion and then invites participants to share ideas about other norms. Suggested norms for facilitator to promote: *Confidentiality, respect for the opinions of others, think critically and don't be afraid to challenge in a constructive manner, participate so that every voice is heard.* Norms are written on large paper so these can be posted weekly.
- 10 minute icebreaker: “Two Truths & a Lie”

Shared Social Adversity Narrative (10-15 minutes)

- Facilitator explains prior study, which involved meeting with UNC juniors and seniors to survey their college experiences and attitudes.
 - “I’m going to give you a summary of one aspect of the results that was particularly interesting to us. These results were consistent across students in different class years, of different race, gender, and so on. We’d like you all to read through this carefully as students who are still in the transition phase of college or closer to it. We will get your opinions about it afterward.”
- 5 minutes: Facilitators provide students with Junior/Senior survey handout to read, which conveys that initial social adversity is a normal part of the transition to college for all students that does not usually last. The goal is to help students to attribute initial social difficulties to a universal adjustment process, not to something “wrong” with themselves.
- 5 minutes: facilitator summarizes, “Now we would like to get your views about why you think people’s experience in college develops in the way the Junior/Senior Survey describes. I want you to take some time and reflect on your own experiences as a freshman here at UNC thus far. In a moment I will ask you to work in groups to write a speech about why people’s experience in college develops as it does. Consider any aspects of your experience that are echoed in the survey results you read about. You can look back on the survey as you work. The goal is to really understand how people’s experience in college changes over time. Next fall we plan to take excerpts of what people write here and show them to students coming to UNC next year or in subsequent years so they will know what their experience is likely to be like. I am sure that students who read about your experiences will appreciate the effort that you all put in.”

- Provide students with Speech prompt worksheet (*see Appendix*) and pens so that they may make notes on it if they would like. Encourages students to reflect individually on the prompt, thinking about the experiences they identified in the self-exploration activity.

Hands-on Activity: Social Adversity is Shared (20-30 minutes)

- 15-20 minutes: Students work in pairs/small groups to develop a speech to deliver to incoming students about adjusting to college.
 - Facilitator informs students that their speeches will likely be incorporated into materials for helping the next class of first year students adjust. “Work together to come up with a message to share with incoming Hispanic/Latinx freshmen. Imagine that these will be compiled into a video or brochure, so act like you are speaking directly to the incoming class. Any length of message is fine, short or long- it is up to you and your partner!”
 - Facilitator provides groups with large paper & markers for writing their speech.
- 5-10 minutes: Facilitator hangs speeches on the board and encourages group members to reflect on similarities and differences between the speeches.

Session 2: Growth Mindset

Skill: Malleability of Intelligence

Objectives for Students:

- Understand the difference between fixed and growth mindset
- Understand that academic challenges drive brain growth and promote learning

Materials Needed:

- List of group norms
- Name tags
- Clipboards
- Video clip: Eduardo Briceño's *TEDx Talk: The Power of Belief- Mindset and Success*
- Means of playing the video (e.g. television, projector)
- Large paper and markers for letter-writing

Growth Mindset Video & Discussion (20 minutes)

- 5 minutes: Facilitator leads brief discussion on students' definitions of intelligence and then plays the *TEDx Talk* to emphasize that the brain grows and stretches when an individual stretches to learn new ideas or concepts. This could be introduced by linking it to the idea that freshmen students at UNC often express feeling intimidated by how "smart" their peers are, particularly if this has come up in the session 1 discussion.
- 10-15 minutes: Students are invited to discuss their thoughts about fixed versus growth mindset. Facilitator ensures that the message is conveyed that the mind strengthens when it is exposed to new challenges. It may be useful to point out that schools are trying to change how they teach children based on the research he cites but that many of us were likely exposed to these fixed mindset messages.
 - What were your initial reactions to the video? What stood out to you?
 - Does this change your perception of intelligence at all?
 - What is your impression of the difference between a fixed and growth mindset?

- What do you think of the following quote (write on whiteboard): The moment we believe that success is determined by an ingrained level of ability, we will be brittle in the face of adversity” –Josh Waitzkin
- What does Edardo Briceno mean when he says “Neuroscience shows that the brain is very malleable”?
- What do people with fixed mindset focus on most? Those with growth mindset? How do both mindsets view effort or obstacles?
- What do you think about his point that people who are exposed to stereotypes may be more likely to get fixed mindset messages? (e.g. women, minorities)
- If your fixed mindset voice says, “I can’t do it”- he suggests adding “yet”. Can you think of any other fixed mindset thoughts people might have? How can we change them?

Hands-on Activity: Growth Mindset (25 minutes)

- 15 minutes: Students work in pairs with a different partner than during the last group. They are prompted to think about a time they faced a learning challenge (this can be anything from solving a problem, managing people, learning a new sport, failing a class)
 - Handout worksheet with 4 questions
- 5-10 minutes: Facilitator reconvenes the large group, asking students to share their experiences

Session 3: Self-management

Skill: Goal setting

Objectives for Students:

- Articulate a vision for the future and steps needed to achieve it
- Develop skills for short- and long-term goal setting
- Understand how goal setting can be helpful in promoting motivation and achievement

Materials Needed:

- List of group norms
- Self-exploration worksheet (*see Appendix*)
- Vision for the Future worksheet (*see Appendix*)
- Name tags
- Clipboards

Self-exploration Activity (5 minutes)

- Students complete a worksheet (*Appendix*) prompting them to imagine the adult they want to be after college, with the goal of creating a broad vision of their future ideal self.

Discussion of Goal Setting (10 minutes)

- The facilitator begins a discussion about the self-exploration activity:
 - Was it difficult to identify what you want your future to look like?
 - Is this something you've done before?
 - Why do you think it might be useful to identify a "vision" for the future?
- Facilitator may wish to emphasize that identifying vision can provide clarity and motivation, as well as help students to determine "stepping-stone" goals needed to achieve the larger goal.

Hands-On Activity: Setting Goals for the Future (35 minutes)

- 15 minutes: Students work individually to set specific goals that will help them achieve their vision of their ideal future. Facilitator provides them with pens and a worksheet with guiding questions (*see Appendix*). Facilitator floats around the room to support students in identifying specific, realistic goals. If a student is stuck because he/she doesn't have a clear idea of a career path, help student reframe to consider how he/she might figure out what a possible career path might be. Goals do not have to just be career-oriented; they can be personal as well.
 - This portion of the worksheet emphasizes identifying 4-5 specific goals, narrowing the list to three of the most important, and then articulating *why* these goals are important. Facilitator should ensure that students feel that the goals they selected are attainable, as positive outcome expectations are important motivators of goal-oriented behavior.
- 15 minutes: Students work in pairs to identify “sub-goals” that they must take to reach their 3 identified goals, as well as possible barriers to achieving their goals.
 - Facilitator should encourage the pairs to focus on one person for 7-8 minutes and then focus on the other person for 7-8 minutes, emphasizing that they should try to complete sub-goals and barriers for at least two of each person's goals.
- 5 minutes: Facilitator reconvenes students as large group to reflect on the activity and the importance of goal setting.
 - What was difficult about the process?
 - Did anything jump out at you that you hadn't thought about before, like a particular sub-goal you hadn't thought of a barrier that you hadn't considered?
 - Did you think of any new reasons why it might be helpful to have clearly defined goals? (e.g. having clear goals might help students resist distractions- like going to a party instead of studying- or stay focused on their goals even when they are faced with a difficult situation)
- Closing: facilitator lets students know that they will be briefly revisiting these goals at the beginning of the next session (students may wish for facilitator to hang on to their goal worksheets to give them back to them at the start of next session).

Session 4: Sense of Belonging

Skill: Values Affirmation

Objectives for Students:

- Reflect on values that are most important to them
- Identify why the identified values are important to them

Materials Needed:

- List of Group Norms
- Markers
- Paper
- Pencils
- Self-exploration worksheet
- Values affirmation worksheet

Self-Exploration Activity (10 minutes)

- Students reflect on and build off of goal setting activity from prior session, using worksheet (*see Appendix*) that prompts them to consider how they will know when they have achieved their goals and how it will feel to achieve their goals.

Value Affirmation Activity (35 minutes)

- Facilitator very briefly introduces the topic: identifying values. People are raised with certain values or in communities or cultures with certain values. College can be a time when you encounter people with different or similar values, although some may not notice this at all.
- 15 minutes: Provide a list of values (*see Appendix*) and have students work individually to identify and rank their top 3 or 4 values. The worksheet also prompts them to identify why they feel these values are important.
- 15 minutes: Students divide into pairs and facilitator prompts them to first spend 7-8 minutes discussing one person's values and then switch. Facilitator encourages students

to share at least one of the values they find to be important, or all of them if they feel comfortable. They then work with their partner to discuss several of the following questions:

- What do my values say about who I am?
 - How can my values help me reach the goals I set for myself?
 - How can my values help me be successful in college?
- As a large group:
 - Did anyone have an experience coming to college where they found that other people were very different from them or other people had values or priorities they couldn't relate to?
 - How do you think your values influence your college experience?
 - Based on this discussion what messages would you give to incoming freshmen about values and the college experience? (Facilitator may write on whiteboard).

Closing of Group (15 minutes)

- 5 minutes: Facilitators reconvene as a large group to close the group. Facilitator thanks students for their participation and lets them know that their feedback about the groups will be helpful in continuing to improve the program for future students
- 10 minutes: Students complete post-group evaluation measures.

APPENDIX G: QUALITATIVE CODEBOOK

The **bolded** codes below were identified based on literature review and then applied to the data (deductive coding), whereas the *italicized* codes were identified through analysis of the data for emergent themes (inductive coding).

Program Content Codes: Statements that included mention of these content areas were coded as such, to include mention of them as difficulties encountered by college students, benefits offered by participation in the SEL intervention program, or suggestions for enhancing the SEL program.

Sense of belonging: The experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment. Sense of belonging can also be defined as a sense of fellowship with peers and teachers.

Social emotional support: The perception by an individual the he or she is cared for by others, has assistance available from other people should he or she encounter social or emotional difficulties, and/or that he or she is part of this supportive community.

Hispanic/Latino support: the perception that an individual is cared for and understood by other members of the community who share like cultural beliefs, has assistance available from other people, and/or is part of this supportive Hispanic/Latino community.

Academic support: An individual's perception the he or she has resources and individuals that are willing to assist with academic challenges, including peers and/or teachers.

Social initiative: An individual's ability to independently take the first step in meeting other people, including peers and professors. This includes reaching out and introducing oneself or asking a question, as well as by becoming involved in and being open to new activities to meet new people.

Self-management: The ability to successfully regulate one's emotions, thoughts, and behaviors in different situations, including effectively managing stress, controlling impulses, and motivating oneself. This also includes organizing oneself to set and work toward personal and academic goals.

Time Management: The ability to organize and plan how to use one's time effectively, which includes systematic prioritizing of time allocation amongst competing demands.

Stress Management: Techniques for coping with or lessening the physical, mental, and emotional effects that occur in response to challenging events, which include everyday life pressures.

Goal Setting: An individual's process of identifying something that he or she wants and establishing measurable goals and timeframes for reaching them.

Growth mindset: A belief that intelligence is a malleable construct that can be increased with effort and learning. A growth mindset is in opposition to a fixed mindset, which holds that intelligence is a fixed quantity that an individual possesses or does not possess. Growth mindset theory holds that a failure or setback does not represent an indicator of a lack of intelligence but an opportunity for intelligence to be expanded through learning.

Perseverance: Steadfastness in completing a task or pursuing a goal despite difficulty or delay in achieving success.

Program Delivery Codes

Group size: The number of students who meet with one another regularly in the face-to-face SEL program at any given time (the number of students in each iteration of the treatment group).

Small group size: The expressed opinion that the small group setting, as opposed to a one-on-one mentor or large organization, was beneficial to student participation in the SEL program.

Program length: The number of sessions or weeks that constitute the duration of the SEL program.

More program sessions: The expressed opinion that holding more than four sessions of the SEL program would be of benefit to student participants.

Program location: The setting in which the SEL program meets on for the face-to-face sessions.

Participation motivators: That which is utilized to encourage students to participate in the SEL program, which could include any means such as a tangible or monetary reward or less tangible motivators such as peer encouragement or benefits of participating.

Food incentive: The opinion that the provision of food during the SEL program sessions is a good way to motivate college students to participate in the program.

Facilitator engagement: Any characteristic of the person who leads the SEL program face-to-face sessions that does or does not encourage the program participants to contribute to program discussions and activities.

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